



Sierra Designs 73

produced by Jean Hägg
photographed by Rick Lawrence
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designed by Alfred Marty

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THE WEST COAST TRAIL

A Current History

British Columbia's West Coast Trail was the site of Sierra Designs' catalogue expedition this year. Originally used as a lifesaving trail for shipping rescue operations, it remains one of Canada's most rugged and beautiful wilderness areas. The remnants of sixty ships destroyed along its length continue to remind the hiker of the severity of the weather and of the treacherous underwater shelf which earned this section of Vancouver Island's coastal terrain the title, "Graveyard of the Pacific."

The trail's southern boundary is at Port Renfrew, situated on the Gordon River, about four hours from Victoria, B.C. It follows the coast north, winding variously in and out of forest and along the flat tidal shelf for fifty miles until reaching Pachena Bay and the fishing village of Bamfield. The heavy rainfall in the area (up to two hundred inches per year) provides dense forest and often wet and muddy slogging along the trail while beach walking is punctuated by deep sea chasms, swiftly changing tidal flows and numbers of creek and river inlets which become rapidly swelled during the rain. Fallen logs, decaying boardwalks and bridges, steep cliffs, gullies, muddy bogs and log ladders make the hiking experience one of constant variation and attention. Likewise, this same variation provides some of the most spectacular northwest landscape to be seen.

The original lifesaving trail has its origins in Canadian shipping history when coastal exploration and commerce centered around the resident Nootka Indians and the otter trade. As otter became more and more scarce, fishing and timber became the mainstays of northwest economy, and the coast off Vancouver Island saw continual use (and mis-use) of natural resources. With the increase in shipping came an increase in offshore shipwrecks to such a number that in 1890, the Provincial Government began to clear away portions of the forest and established a telegraph line along the coast from Bamfield to Port Renfrew to help in rescue operations.

The wreck of the S.S. Valencia near the Klanawa River in 1906 with the loss of one hundred and twenty-six people was a sign that the trail had to be improved substantially. Small cabins with emergency supplies were established along the telegraph wire, some of which are still standing. The trail was improved and patrolled until the advent of more sophisticated ship-to-shore radio methods at which point the lifesaving function of the trail was abandoned.

During the late twenties, portions of the Nitinat Lake and coastal area were established as a park reserve for recreational purposes. But the remoteness of the area and the severe weather prevented large scale development. Deserted remains of the small town of Clo-oose near the Nitinat Narrows attest to the failure of early real estate ventures which developed out of the new reserve, and by 1947 the plan was dropped.

The thick salal and undergrowth began to take over the boardwalks, shingle houses and even a golf course built at Clo-oose while various logging concerns fought over portioning of the newly available area. In 1957, the Clayoquot Circle (a group of small, independent loggers established after the reserve) disbanded and larger conglomerate interests took over. Fortunately, logging on the actual coastal range was still non-existent due to the difficulty of access and the age of the trees, many of which were past their prime for timber.

About the time that logging interests began to penetrate this dense coastal forest for new resources, hikers were discovering the beauty of the old trail, despite its overgrown condition. In 1970, conservation interests and the federal government were able to establish the West Coast Trail as part of the Pacific Rim National Park but only with tentative boundaries. At present, the actual boundaries are subject to an ongoing debate between the Council of Forest Industries and conservation groups in an attempt to reach some agreement before a 1973 deadline.

Improvements on the trail, although welcome, will not decisively affect the life of the area if logging concerns continue to eat their way closer and closer to the coast. A narrow half-mile coastal strip is all that, at present, constitutes the trail's eastern boundary. The British Columbia Sierra Club has been actively seeking at least a mile and a half buffer between the coast and any possible development. If the current narrow boundaries continue to exist, one can imagine the number of makeshift entries that will be easily cut through the brush to provide access to particular areas along the trail. The overuse of any one area would mean its destruction; in such a wet climate, the balance between soil condition and plant life is delicate to begin with, and to cut randomly across the foliage would set massive erosion into operation. And equally, the prospect of logging roads visible from the trail, logging trucks, buzz saws, motorized camping and large numbers of campers is grim indeed.

As a kind of bridge between the history of the trail and our own interaction with it, it remains necessary to urge anyone interested in the quality of the wilderness to exert pressure on particular members of the Provincial Government to preserve as much of the West Coast as possible. Sierra Designs is in complete accord with the proposed Sierra Club and National Parks plans regarding the trail and the Nitinat Lakes, Hobiton drainage areas. We urge anyone interested in the trail and in the conservation of Canadian wilderness areas to use the following addresses to express concern:

Premier Dave Barrett
Parliament Buildings
Victoria, B.C., Canada

Hon. Jean Chretien
Minister for Indian Affairs
and Northern Dvlpt.
Parliament Buildings
Ottawa, Ontario, Canada

Hon. Ernie Hall
Parliament Buildings
Victoria, B.C., Canada

Hon. Bob Williams
Division of Travel and Recreation
Parliament Buildings
Victoria, B.C., Canada

Further information may be obtained from the Sierra Club of British Columbia, 1572 Monterey Avenue, Victoria, B.C., or the Sierra Club, Box 385, West Vancouver, B.C. A helpful discussion of the conservation aspects as well as being a useful trail guide is found in THE WEST COAST TRAIL AND NITINAT LAKES, published by the British Columbia Sierra Club.

★ ★ ★

A note about landscape. The quote by Ed Dorn which prefaces the journal is a reminder that the landscape begins with the one looking at it. And there is a way in which we tend to absolve ourselves from actually "using" the wilderness by regarding it as some discrete other world, cut off from everything. What these photographs will chronicle for one's eyes is not always the harmonious, peaceful interaction with nature that a backpacking catalogue might want its products to illustrate. Rather, the looks of frustration and personal embitterment, of exhaustion and grim resolution at times provide another aspect of the landscape which mediates all other concerns.

We discovered the severity of the hiking experience and our own personal distances almost at the same time. The first day out indicated that it would not be an average walk, and as the difficulty increased and our packs seemed to grow heavier, personal antagonisms flared and openly festered. The utilitarian function of the trip (ostensibly, an occasion to photograph a backpacking trip in spectacular country for the catalogue) was at odds with the unmanageable terrain.

Hiking two miles in a day is little enough progress but to have to stop at numerous intervals to take a picture, refocus, take a light reading or set up a tripod was often too much to handle. On the other hand, the unwillingness to work in terms of this function caused a good deal of friction, particularly around the camp at the end of the day—a time when one wants to forget a sore back or a nagging blister.

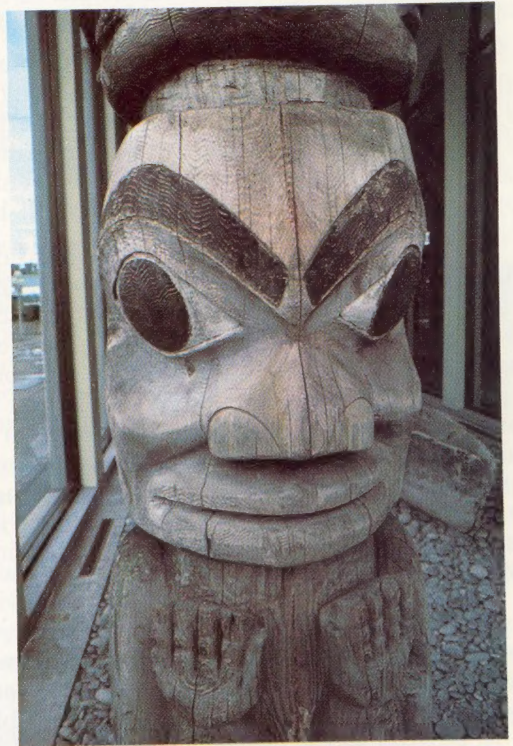
The weight of camera equipment plus the heaviness of food for a ten day trip (much of it fresh) made log hopping, rope climbing and bog slogging a nightmare. Eating away the extra weight seemed like the only alternative, and we tended to gorge ourselves during the first days so that by the end we were running low on food. Happily, the profusion of fresh wild plants and berries and a few evenings with fresh trout or shellfish extended our supplies so that by the last night, we still had enough for a hearty soup.

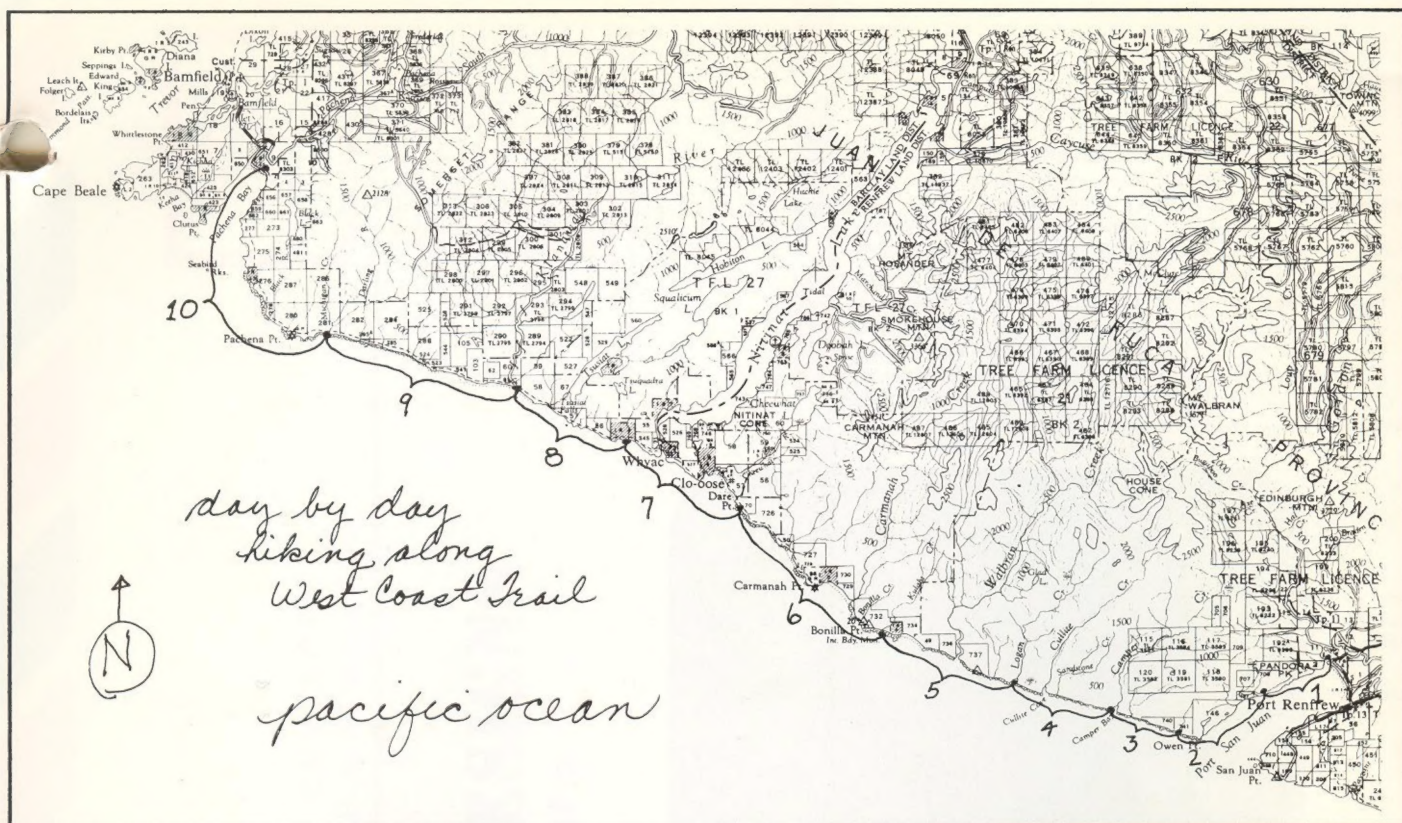
What occurred in keeping a day to day account of this expedition was some attempt to incorporate the natural landscape with the personal—and this has contours as readily accessible to the eye as the relationships between drainage and forestation, the interaction of rain and wind on plant life, the endless cycles of decay and regeneration, the sudden chasms and gullies made by water in motion. It is not enough, any more, merely to voice desperation at the destruction of the land or deal strictly in metaphysical generalization about natural systems. What is required is a self-criticism by which every assessment of a landscape reflects back upon the one making the statement. In practical terms, it means acknowledging one's own participation in the very terms of usage. It means knowing who you can travel with and who you would be willing to undergo situations of stress with. It means recognizing that shared work is a primary mode of life in any stable structure, natural or cultural.

The wilderness, we might remember, is a human invention. It lives perilously close to extinction because of our abilities to define it as something discrete and apart from us. If we carry too much of our own personal "effects" into the woods (and by this is meant personal differences as well), we become blind to the landscape at hand. Carl Sauer quotes Goethe to the effect that, "One need not seek for something beyond the phenomena; they themselves are the lore." In this sense we can learn something from what we're in already.

Michael Davidson

Northwest Indian Totems





there is a total journal with the eyes (Ed Dorn)

journal by Michael Davidson



Saturday, 9/9: Nick and I arrived in Victoria last night. This morning went out shopping for the trip. Found wonderful produce, meats, cheeses. Wasn't quite sure what quantities to get for nine people so tried to find variety of vegetables and smoked meats that might be intermixed and blended.

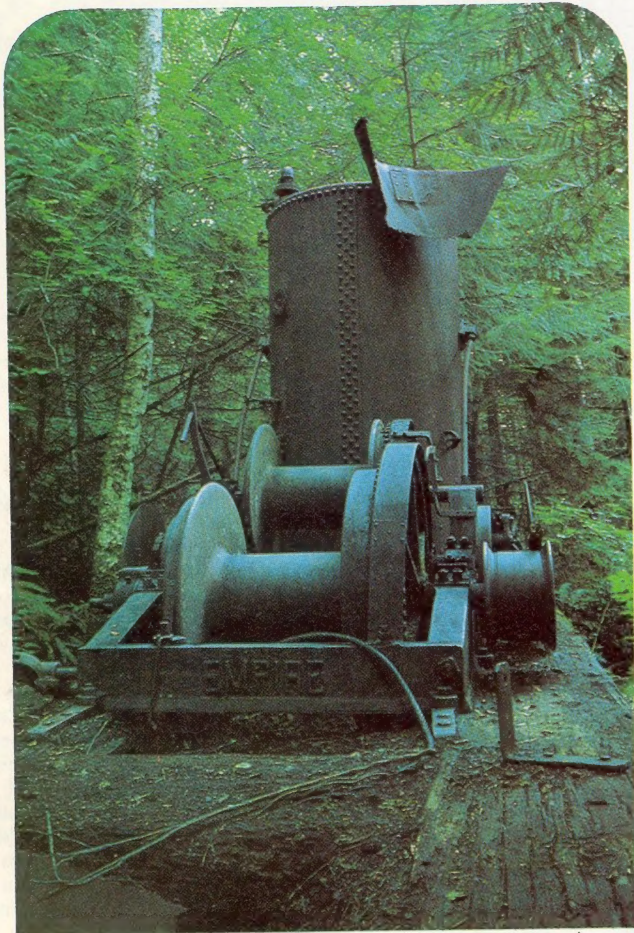
Later, visited Provincial Museum with its large collection of northwest Indian artifacts; basketry, masks, beads, totems and shawls. Outside is a shed where totem poles are being made or copied out of cedar . . . wonderful smell from cedar shavings everywhere. Met rest of group (Bob W., Bob S., Jean, Whitney, Bill) in Empress Hotel bar in afternoon. Discovered, unhappily, that two anticipated members of the party wouldn't be able to come. Took expedition "commencement" pictures inside the Empress Hotel and then drove out of town over miserable logging road to Port Renfrew in two cars. Set up camp in dark and fixed dinner. Very tired and somewhat apprehensive of new situation.

Sunday, 9/10: Bob W., Nick and I stayed around Port Renfrew while the rest shuttled cars, leaving one at the northern trailhead at Bamfield and then driving back in late evening. We spent day packing equipment and food, swimming in nearby Fairy Lake and wandering into town. Renfrew is about half Indian and half white, mostly lumber workers. B.C. Timber responsible for complete devastation of nearby hillsides, cutting entire tracts and leaving no watershed or wind protection whatsoever. Token signs at forested edge indicating re-forestation, but in this rainfall it's hard to imagine a seed taking.

Late at night, rest of party return, dead tired from driving eight hours on potholed, rocky roads. Ate dinner (vegetable, beef curry) by candle lamp. Anticipating notorious difficult early portion of trail tomorrow morning.



Bamfield



donkey engine



highest point on trail

journal by Robt. Swanson

Sunday, 11th September — A damn fine morning and going at last! For months we had been planning and anticipating photographing our catalog on the west coast trail of Vancouver Island. We had read about the history and hazards and beauty of this remote trail and I was very excited at the adventures which lay ahead. The final packing of gear for 10 days' hiking — heavy with tents, raingear, stoves, fuel, cameras and fresh food — left us with a collection of packs weighing 50-60 pounds with the general appearance that they had been packed by incompetents or small boys on their first outing in the local meadow. Tripods hung from them, various sacks, frying pans, day packs, an axe — they did not have the trim, butter-wouldn't-melt-in-your-mouth backpacking catalog look. In addition we had four large bowling-ball-shape and weight sacks left over to hand-carry. This gear and our seven bodies were ferried across the Gordon River in three trips by the Indians who live at Port Renfrew. A few pictures of the "start" were taken on the north shore and we lunched off. Michael and Bob W. (the strongest walkers) took off ahead and were not to be seen again for 6 hours.

The toughest part of the trail was this southern end and we spent the afternoon in the loveliest jungle gym imaginable. Green, damp and thick with the smell of cedar and fern — we sweated into that earth as we dragged our little snail-line of packs and bowling-ball sacks under and over fallen trees; inched up and down crude log ladders. I cursed my pack, whose straps were complete junk that jammed into a useless snarl of nylon — I tied off the "adjustable" straps with knots and for the rest of the trip my pack was miserable. The people at Sierra Designs would hear about this later. After a few hours we reached a sunny ledge where there was a tiny stream of water . . . it was luxurious to rest and eat and we were loath to put the packs back on. At 5:30 we reached a landmark on the trail — a large donkey engine used years before in logging operations. This derelict monolith, its rusting frame inscribed with the word "EMPIRE," excited our curiosity and imagination and we spent some time photographing around it and discussed if we should spend the night there, for it was getting late and there was level ground for sleeping. We did not know how far ahead Michael and Bob W. might be. If we went on we might have to make camp at an unsuitable spot or in the dark. I was tired and irritated that the group had split — each proceeding separately with their own speculations. After 5 hours we had come 2½ miles said the implacable map.

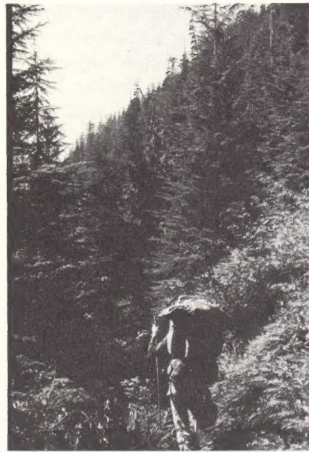
We put our terrifying packs back on and pressed forward another ½ mile, where we were delighted to find Michael and Bob had made a camp (noted in guidebook) at the highest spot on the trail. We had a tremendous view and a delicious dinner. Our first day had been sunny, and difficult; we turned in on a clear, starry night with the lights of towns on the Olympic Peninsula winking across the Strait of San Juan de Fuca.

cont. journal by M. Davidson

Monday, 9/11: Utterly fatigued and discouraged. First day on trail a complete slog; pack weights must run between 60 to 80 lbs. Ferried over from Port Renfrew across Gordon River by Art Jones' son (of local tribe here . . . Indians live in wierdly out of place American row houses at the edge of the woods). After preliminary adjustments, photos, etc., Bob W. and I take off ahead on heavily overgrown, muddy trail. Everything up or down, around or over but never the straight or horizontal. Log ladders or notched trees and at times a fixed rope provide most of the vertical aids and the footing on log bridges is slippery indeed. Weather, however, is clear and hot . . . when trail emerges into clearing, the view of the inlet is grand.

Reached camp high above Port San Juan in late afternoon with Bob . . . no sign of others and no water nearby. We picked up pots and doubled back to a spring passed earlier in the day and then returned to camp. Spilled good portion of water, tripping on roots, sliding back down a cliff, cuts and bruises. Worried about accident with others on log ladder or bridge . . . desultory thoughts of having to return tomorrow, having barely begun. Trawlers offshore, lights blinking in early evening. Olympic Peninsula beacons reaching across strait as sun goes down. Probably covered 2 miles at most.







150 yard creek

Tuesday, 12th September — I took my somewhat tired body out of the sleeping bag at 7:00 and reflected how two months of traveling around the country by car and airplane (on the business of Sierra Designs) had left my body flat and stale — it would get worse before getting better. We reorganized our overloaded packs, but there was no way to really make things much better and it would be some days before the weight diminished — after a dry summer, we were having to carry our water. The morning walk started down a steep cliff with a fixed rope that made it possible. This day would see 6 hours of hiking yield 3 miles — thank God the conditions were ideal, for in the rain this part of the trail would be a nightmare. After a long day of difficulties the final mile to camp was a pure perversity of slick logs, deadfalls and ladders. Always another obstacle! — you simply cannot get out and s-t-r-i-d-e! We were all very tired upon joining up in camp. The location was beautiful, but in a deep, cool, fern-forest mood — and what this day's end needed was heat and sunlight. Depression and hostility laid on the air. After silent bathing in the dark, beautiful stream we ate dinner and had a blow-up. It was probably inevitable; our group of 7 people all worked at S.D. in varying capacities — from president to part-time clerk. We all hoped and expected to have a great time and mutual adventure, but we imposed the task of making a catalog on top of it. The friendships ranged from casual to very close — we were comrades, but employer and employed — we were on a backpacking trip, but also at work. And we were on a very difficult trail that was likely to become more so. Our party almost split on this second evening out, and although it was averted — the spirit of the venture cracked. We all went to bed depressed, cool, damp. The mood was set and remained throughout — divided — resentful — joyless.

never the straight or horizontal



Tuesday, 9/12: Rest of party showed last night, equally fatigued but big spaghetti dinner revived everyone. Today, grim sludge thru rain forest, staying mostly on fallen logs across bogs. Astral forest with diffused William Morris light patterns, filtered sunlight thru tall cedar, juniper, lodgepole. Terrific apprehension of Yggdrasillic/World-tree figure while stopping at creek for water . . . crouched under huge ancient tree fallen over, literally covered with other growth: lichens, mosses, ferns, tiny white flowers on single stems, fungi of various colors; sense of life living "upon" life in some happy resolution.

Rain here brings incredible foliage. Startled at times by sudden bursts of color from red or orange mushroom caps tucked down in this deep deep green; an occasional purple or lacy orange-yellow coral fungus. Smell of wood in all stages of growth and decay, the active presence of carbon cycles at work in heavy air. One's breath seen or felt as "substance," participating in something larger than muscular contraction. Foghorn from Carmanah Point in distance like friendly basso Nibelung, mocking one's own heavy panting.

In camp at 150 Yard Creek. Terraces leading down to creek. Took bath in cold foglight . . . creek with wonderful mottled rock pools. Big blowup at dinner; various members angry about weight of packs, slowness of progress, lateness of departure in morning aggravated by necessity of stopping to take pictures. Difficulty of trail makes it almost impossible for proper camera angles and consistent light readings so hiking is punctuated often, slowing already snaillike pace. A few here feel more like porters than anything else. Others feel that "roles" had been clarified before departure. No resolution yet, but at least the air is cleared.







sandstone shelf

Wednesday, 13th September — We broke camp at 150 Yard Creek and hiked a short distance to the beach. We all felt elated, breaking out to the sea—I was ecstatic. The release from the forest—the breadth and space of the beach. We stretched our legs and bodies out onto the sandstone shelf and for awhile forgot the evils of the night before. We were in a new land of fog, horns, and seasmell. After a fast mile and a half, we had lunch on the beach at an access creek. It was cool with just a glimmer of sun; one of those pleasant, precious moments when we realize ourselves in the earth and natural things. After lunch we toiled up a mud and slab slope with the necessary aid of a rope. Our beach holiday ended and we were back on the forest trail; the wet and rotted logs, the crawling and lurching up and over. We came to the anticipated “blow-down” area—a landmark of difficulty on the trail. However, I liked it very much for you could cover all that ground on long, fairly firm logs. What gets to people is that the logs are as much as 100 feet long and 20 feet in the air—balancing across them with a heavy pack can be very scary—“hairy” was a notation on our map from a previous party. Wet weather could have made the blow-down very difficult, but we had a warm, dry afternoon and made good time over this portion. At the end of the day we came down to Camper’s Cove—a beautiful beach at the bottom of a steep, slippery, laddered cliff—and had a luxurious late afternoon of bathing, sunning and fishing. Three days and we had come 7½ miles.

Wednesday, 9/13: Much better feeling in morning, assisted by brief passage on rock shelf by the ocean . . . pleasant respite from forest slogging. At times the shelf is broken by chasms which necessitate building makeshift bridges out of driftwood. Tide pools full of life and quite deep.

Lunch and icy swim before climbing up muddy cliff to trail again. Afternoon walk thru anticipated “blowdown” area . . . large tract of fallen trees, lying across each other randomly due to improper logging and heavy coastal winds. One walks entirely on logs which rest anywhere from four to twenty feet off the ground . . . no guide ropes or intermediary trees to grasp . . . very tricky, slippery but at least solid, unlike the trail itself. Everyone’s acrophobia triumphed at some point. Zen archery a help. At end of all this, a steep cliff with shaky log ladders to this camp at Camper’s Cove . . . mud in face, on boots, covering everything. Took bath in creek inlet, feeling very refreshed. Encountered two women hiking same direction who have covered the area from Port Renfrew to here all in one day . . . very admirable indeed. Bacon condé for dinner following which two other hikers enter camp going opposite direction . . . one having just fallen into one of the sea chasms, now drying off in front of the fire. Wet wool smell.





blow-down area





Swamp

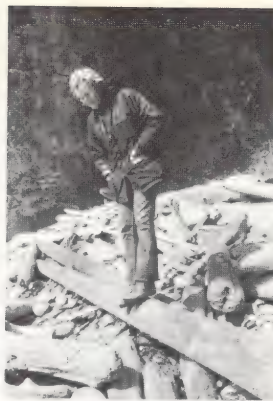
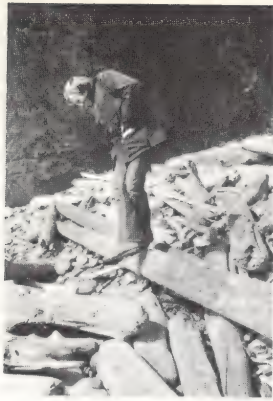
Thursday, 14th September — At Camper's Cove we met two Canadian women who had traveled the same distance as we — only they made it in one day. My pride emphasized that they were only two, and lightly loaded and in a hurry. But, there was no doubt they were strong young ladies in good condition. (Note, reader, that five miles a day is a decent average on this trail — personal choice can alter that either way, and weather will definitely make a difference.) On this morning we broke camp at nine and had to wade the stream at its mouth. The bottom was very slippery and difficult and we formed a nine-person chain to ferry our gear across. We had chosen to take the beach route over the forest route — confident that we could cross the sea-chasms along our path. (These are deep troughs cutting through the shelf and butting into the cliff . . . rare you can turn them at the head, for they undercut the cliff; they are deep, straight-sided and full of surging water — not inviting to swim.) We had to find logs to span these troughs and then balance across them with a stretched climbing rope offering us a more apparent than real security. We continued along at a good pace and had a sunny, but coolwindy lunch at Sandstone Creek. After lunch we hiked up the creek from the beach; there was just a trickle of water, but the smooth tiers and deep holes promised fantastic cascades and pools when the stream came up with rain. Reached Cullite Creek at about 3:00 and decided to push on for a camp at Logan Creek. Before Logan there was 1½ miles of swamps, which were rather barren areas, flat with scraggly pine growth. The swamp was fairly dry and we only went in up to the calf — watch out when the rains come! When not in the swamp it was up and down, slither and crawl. We reached the drop into Logan Creek — ladder after ladder and small, slippery slide sections. Somebody counted 95 ladder rungs down to the creek . . . however, the beach camp was gorgeous with driftwood, shanties and the debris of the sea.

Thursday, 9/14: Morning, stripped down and ferried packs and equipment across Camper Creek onto rock shelf . . . fell on slippery rocks and have various cuts from barnacles. Walk on shelf broken by chasms, endless taking off of packs and clothes and wading or climbing around points . . . fixing ropes, moving logs across inlets, dressing and readjusting everything. Weather continues to be a blessing during this difficult first portion of the trail; rain would slow things considerably.

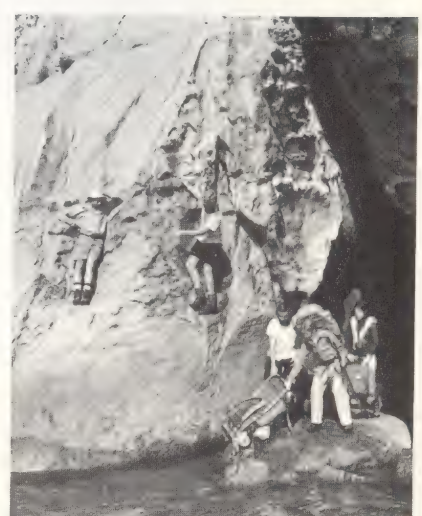
Lunch at Sandstone Creek and climb up smooth rock waterspill to trail. Walked in the afternoon thru worst bog yet . . . mud holes from ankle to knee deep . . . sound of schlurping and sucking and occasional startled shouts from various of us, sinking down above the gaiters. Another cliff down to Cullite River and then back up across another bog and down again into Logan Creek, where we're camped. Beach inlet camps yield wonderful shanties made of driftwood and beach flotsam . . . looks like Tortilla Flat.

Wandered around beach looking for floats, interesting driftwood or shells . . . found instead plastic soap bottles, milk cartons, plastic detritus from world's indestructable slovenliness unlike serene rainforest which transforms its waste into itself.

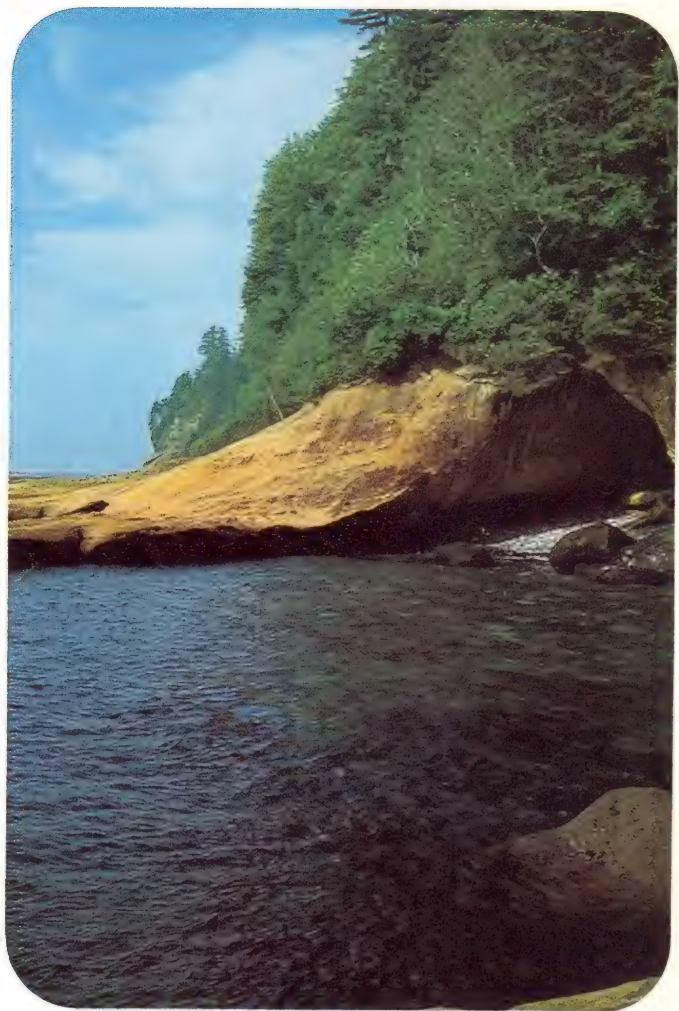




my pack!



Walbran Cr. lineman's shack



Friday, 15th September — A leisurely morning was spent taking pictures out on the broad sandstone shelf — there were many cormorants and some diving ducks fishing in the foggy-morning halflight. We were all grateful for the morning off to repair either body, soul or gear. The climb up out of Logan Creek was damned steep and one held on by roots, small bushes and the jamming of boots and walking sticks into the slippery earth. The early afternoon had moderate forest and an easier bog; the trail is yielding and the packs are almost perceptibly lighter, and we are becoming tougher. We had a late (3:00), meager lunch at Walbran Creek and then walked on two hours to Kulaht Creek — a beautiful, but apparently little used campsite. Michael and Jean — our creative camp cooks — prepared a lentil soup that was simply delicious; it had some fresh vegetables in it and just a little gravel from the beach — but not enough to ruin it. Michael, Jean and I talked late into the evening, while the wind began to come up and it got colder. We all went, gratefully, to our tents and sleeping bags. The smell of the night and the look of the sky said our morning would be rain.

Friday, 9/15: Walked on beach almost all day except for one long stretch in another lousy bog which was almost denuded of trees. Seabirds in abundance on beach for first time. Bob W. identified mallards, teals, mergansers, gulls and sandpipers. Beach-walking offers its own problems with difficult footing and irregular pace . . . tension on lower legs; calves a little sore today. Camped tonight at Kulaht Creek near inlet . . . very little protection and practically no established campsite. Wind coming up for the first time . . . sand in dinner. Discussion of rain by tomorrow.



lunch





Saturday, 16th September — The weather broke during the night and we awoke to a fine, gray rain being stippled onto the tent walls. In the dry warmth of my sleeping bag I welcomed the change of weather, and thought about the mountain snows to come and the rest and quiet renewal of winter.

It took quite a bit of stove fuel to get the fire going and we seven shuffle about in ponchos, parkas, rainchaps — either smug we had prepared for the rain or disgustedly looking at soggy things left out in the night. Huddled around our minimal breakfast we look like so many characters from the barrens of Denmark . . . like hulking characters out of a film version of LEAR I had recently seen. We hiked along the beach in the rain for about four hours — soft sand and tricky rock hopping. We passed below the Carmanah Point lighthouse, went up the beach ½ mile and had a lunch of bouillon and cheese with nuts . . . and surprise! . . . Michael and Bob W. had found a treasure. They had found a dozen fresh and beautiful shipwrecked oranges strung out like a necklace along the beach. They kept their secret until lunch was half over and then blandly asked . . . "would anyone like an orange?" The response was cautious — then breaking with satisfaction they brought out one, then two and then another and the faces that looked tired and gray came alive and the sharing of the oranges drove a small wedge of comradeship into the group for a brief time. We continued on in clearing weather and made a sunny beach camp a mile south of the Cheewhat River and the abandoned town of Clo-oose. That night, after a very delicious soup, good fortune came down on us again — as Bob W. returned from fly-fishing the river with four deep-bodied, sleek and beautiful Cutthroat trout. Saturday night fish-fry.

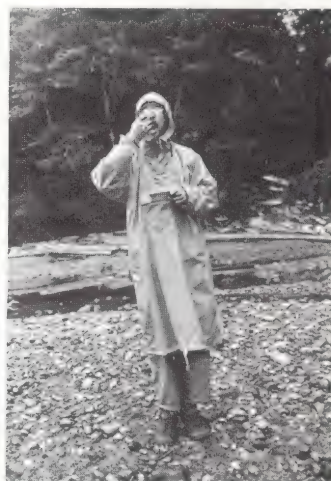
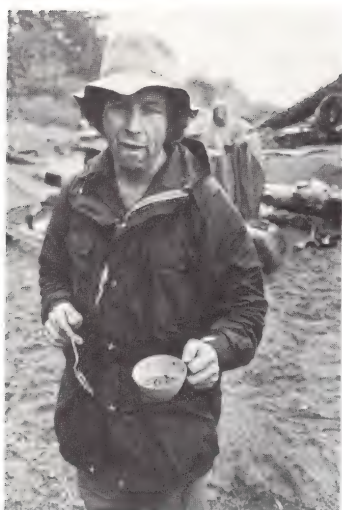


Saturday, 9/16: Rain, sure enough. Difficult morning as a result . . . everyone slightly annoyed. Nick continues to amaze me; his energy is always high, despite the difficulty of the trail and his own lack of experience (whatever that means). Somehow he manages to take pictures in the worst possible situations, and today's rain required some fancy self-protection from both bad weather and even worse personal climate . . . that is, it's hard enough to stop for a picture when the conditions are bad, but it must be excruciating for a photographer to know that one's subjects are transferring those same bad conditions right through the lens into the one taking the pictures. Unforgettable image of Nick getting light reading in pouring rain, umbrella in crook of arm, light meter in one hand while other hand establishes contrast and holds poncho over two cameras which hang around his neck, pack dripping wet and tripod slightly askew hanging off pack . . . roller crusher hat giving him medicine-man look.

Passed Carmanah Point in morning, lighthouse above headland around which we climbed on slippery rocks, ponchos getting in the way and making every foothold a little hairy. Continued on long sandy beaches, sopping. While trudging in rain, Bob W. and I passed time conjuring bowls of fruit and other inaccessible goodies. Our food supplies are getting a little low, partially because of the gorging we did during the first few days to get rid of some weight. As the talk of melons, pineapples, grapes and oranges continued, our indulgence seemed a little out of hand when all of a sudden an orange appeared on the beach, newly brought in on the tide. Very sweet and juicy. As we walked along, discussing our good fortune, we found another and then another in a long row just at the tide line . . . picked up about 12 to 15 of them and brought them out at lunch to everyone's pleasure . . . what is that line about pumpkins bobbing on the tide? Someone apparently lost a crate.

After lunch, walked around another headland and back onto the trail which has been easier going in the last day or so, following shore closely with thick salal forming absolute boundary between beach and woods. Came back out on beach again near Cheewhat River ("Piss River" the Indians have it) where sun came out gloriously. Took wet items out of pack and dried in sun. Everyone pleased with campsite which is, once again, cleared out of driftwood, making a number of sturdy enclosures. Bob W. fished in river late in the afternoon and returned after dark with four trout which we cooked in the coals. We're about fifteen miles out after this many days . . . thinking of difference between this and average day in Sierras.

Should mention equipment at some point. High gaiters are a must in this kind of country (and in conjunction, tide tables). Rainchaps have been helpful in the heavy underbrush. Can't get used to poncho which flaps around in the wind . . . cagoule might be a better idea. Old Goodwill-bought golfshoes would be perfect for the log-walking making up thirty per cent of the trail. The tents have been fantastic even when there's no rain since the morning dampness is very heavy. Rope has been used almost every day for one thing or another. Collapsible water bottles would have been useful, given the size of our party and the fact that fresh water at beach campsites is often upstream a ways. Grill is essential as well as cook-fuel, the latter used primarily for lighting damp wood . . . haven't had to use a stove yet. Book on edible plants has been helpful also; wish I'd thought to bring book on fungi — woods are full of all varieties and some must be edible. Dry tennis shoes necessary.





Whyac



Sunday, 17th September — I don't believe anyone noted that this was a Sunday, and I never recall mention of it, but the day just naturally progressed the way good Sundays do . . . weather fine . . . not so much work in the walking . . . leisurely.

Broke camp in the good weather after a windy, threatening night and walked down the beach among herds of gulls to the mouth of the river. Walked upstream to a fine, large bridge which was left over from the days when Clo-oose was peopled. (There is one recently occupied house in Clo-oose now.) We spent a pleasant few hours picking giant, delicious, rampant blackberries that grew among the falling-down houses. We picked, and ate and collected for later — quarts of berries. Leaving Clo-oose we walked north along the tumbling-down boardwalk, which had been built by the Coast Indians during the early '30s. It had been built to link Whyac and Clo-oose — a distance of a few miles, but it was now in disrepair and falling back into the earth. At Whyac we were to cross the Nitinat River, which required getting either the Indians or fishermen to ferry us. The village was empty, so we lolled around in the afternoon sun anticipating that the Indian fisher/ferryman would be back to take us across. Uh-uh . . . no ferryman and as the afternoon wore on we began planning to take one of the leaking, non-seaworthy boats lying ashore and ferrying ourselves across and then Michael and I would bring the boat back to the south shore and swim the river. The river was deep and swift, and the waters swirled with the flood tide — not at all inviting. Fortunately, we did not have to do it that way, for a passing fisherman alerted a man who lived upstream as to our need. About 10 minutes later a salty, solid and weathered Canadian came along and in a deep, definitely accented B.C. voice began directing us into his boat. In the process of his swift and skillful ferrying, we learned he lived in a cabin upstream that fronted on the river — sounded beautiful and idyllic (but it always looks that way to us city people). He offered to sell us some fresh Dungeness crab . . . so Michael and Bob W. went upstream with him while Jean, Nick and I picked mussels in the river. They returned with 11 giant, alive and claws straining crabs — and three jars of canned salmon he had put up — the salmon was a gift. We were elated and thanked him profusely . . . never learning his name . . . and if he should ever read this we want to thank him again and hope his trail, river and home remain as beautiful and wild as they were this summer.

We hauled up and out of the Nitinat and came out on a beach access a short distance to the north. It was the most beautiful campsite of the trip . . . a lovely bay with a small stream coming down from the forest and a tree-capped rock island set at the water's edge. I pitched the Glacier tent at the base of the rock, a few feet above the high water line. It was a fantastic, lovely place and I watched a ringed moon come out with a wind rising on its heels.

This night was the feast night of the trip . . . steamed mussels in garlic and butter followed by the fresh crab, which was the sweetest and richest any of us had ever eaten . . . probably because of the clean waters of the West Coast. We talked late into the night and expected bad weather.

Sunday, 9/17: Clear hot morning. Sat by Cheewhat and read while Nick and Bob S. took pictures and Bob W. and Bill fished. Growing sense of our participation in the terms of landscape thru reading Herodotus who thinks of history as a "finding out for oneself." So far, our personal differences have qualified much of what we are seeing so that I can't just think of a series of landforms, riverbeds, drainages, etc. We're all interpenetrating with this experience of landscape in ways I never expected.

Walked across suspension bridge and into Clo-oose in afternoon. Trail followed rotting boardwalk which stretches for a mile on either side of the town which began as a real-estate venture during the late twenties and which now lies vacant, covered with blackberry bushes. Stopped to pick three quarts of the ripe berries and ate another two in the process . . . looked around the deserted houses placed on a bluff above a wonderful cove . . . then walked two miles north to the Nitinat Narrows to have lunch and look for local Indians at Whyac Reservation who might ferry us across.

Spent most of afternoon waiting for fisherman or Indian to show up, but as it got later, we began to plug up holes in small boat beached (for obvious reasons) as the only alternative to crossing the fast moving current. As we were about to launch the boat, a fisherman came by and gave us a lift. He lives on the Nitinat Lake which stretches probably ten miles into the interior of Vancouver Island and catches crab for a living. We asked him if he had any fish or crab that he'd like to sell, and he said sure. Bob W. and I rode in his boat up the Narrows to his home, in front of which he pulled up the net and found us eleven big dungeness crabs. He threw in three jars of his own home-smoked sockeye salmon and then took us back down the lake . . . really wonderful guy, pointed out blue heron perched in shallows in some complete command of its space, taking off with long slow wingstrokes oblivious to its own threatened existence. Fisherman showed us wild currants, talked about weather and fishing in the area, completely cut off from roads, towns, etc. — saw resemblance between his space and that of heron — clear possibility.

Back at trail, others had collected large bag of mussels. Packed crabs in big stuffsack and left for this campsite near Tsuquadra Point, hiking out around points and coves, spectacular drops and seastacks. This spot, possibly the most beautiful of all our stopping places, has tiny mound just at tide line with single tree on top — will be Oregon coast-like island in some years. Ate late dinner, feast of crab, mussels, rice, each of us eating until happily stuffed. Ring round the moon means . . . ?





oh you berries!

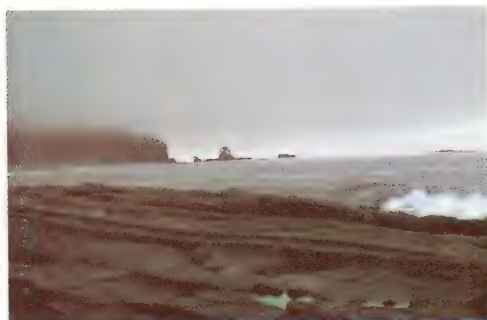


Clo-oose



gathering mussels





Klanawa River



Kusiat Falls

Monday, 18th September — Awoke at 8:30 snug in the Glacier tent — outside the sky was dramatic with storm and the sea was tufted with white. My body was sore and tired this morning. I had a food hangover from the rich dinner, and my face was puffed up . . . look and feel as if I had gone 15 rounds.

The weather came down as we broke camp, and wrapped in our flapping ponchos we walked off in the wind and rain. We were glad to spend most of the day on the beach, as the trail offered only thick salal (which has delicious berries to eat) and slippery footing in the mud. I, personally, was exhilarated at walking along the storm-swept beach and joyously conscious of being out of our over-heated, car-ridden civilization. We arrived at the Klanawa River about three . . . the Klanawa was our last obstacle before Bamfield and we had to either wade or raft it. The river had not yet risen perceptibly and to my delight and surprise there was a cabin with a 55 gallon drumstove. The general air of depression was somewhat lifted by the fire and a lunch of soup, canned salmon and leftover crab. It was luxurious to dry socks by the fire and sit and read in the mid-afternoon . . . indoors. The weather was clearing again and since we needed a low tide to wade the outlet stream, we decided to stay overnight and catch the low tide at 5:00 the next morning. At sunset, Nick and I went down to the beach to photograph a beautiful sky and I became fascinated by the flood tide rushing into the river mouth. The channel we were to wade at low tide in the morning was now full of surging, deep water whose currents and eddies formed rapids that flowed upstream instead of down. We went to bed on the cabin floor. It was small and our sleeping bags made a tight mosaic mortered with shoes and clothes. I awoke once in the middle of the night — it was completely dark and the rain lashed down . . . went back to sleep happy to be in a cabin with a fire burning low in the drum.

Monday, 9/18: Rained heavily all day. Hiked on and off beach, finding extremely thick salal when on trail; wet, whipping the face, arms — one wanted to lurch through it or crawl under it, but no alternative. Stopped at Tsusiat Falls which pour out onto the beach and tried to wait out heavy rain in driftwood shack . . . built small fire and cooked coffee, but rain gradually leaked in and dropped already desultory conversation (Bill, Whitney, Bob W. and me) into silence.

Hiked during brief respite in afternoon to Klanawa River and this lineman's shack. Built big fire in barrel stove, dried out wet gear, sat around in late afternoon (rain clearing) drinking tea, reading. Watched gulls ride high tide into river shallows, waiting for fish to start running through . . . three otters loped along beach and then jumped in to swim gracefully among the gulls and fish, everyone wheeling and cawing and fussing. One solitary seal popping head up right in front of cabin, then passing back out into surf. Rich foliage all around — how to contain sense of symbiosis felt in such growth or of "area" which includes entire history, right back to original telegraph line for ships gone aground, leading to this lineman's shack, and which must include treacherous surf, rocky shore, thick vegetation resulting from same storms that cause the ships to beach . . . each element contained in every other, time become like geologic strata — one infinite plane here in this instant. And Blake's lines leaping up: "stupendous/Works! A World of Generation continually creating out of/The Hermaphroditic Satanic World of rocky destiny." Spooky lines for the one who thinks time a machine, no doubt.

poncho



the poncho/pack battle







Michigan boiler



Tuesday, 19th September — Up at 5:00 and after a meager breakfast of hot water over Granola we walked out and waded the Klanawa. It was easy, but numbing to our morning feet. The day was coming on clear with a child's fairytale book sky . . . it showed pink and green and blue and had gigantic skyfilling cumulus clouds . . . you only needed to fill in a winding road leading up to an airborne castle to make Snowwhite. Our spirits were good this morning . . . we had crossed the last potentially difficult obstacle . . . and we looked forward — as a group — to the end of our journey. The day was good, hard walking, there were many rotted bridges to cross and a number of high suspension bridges with apparently good cables but poor, rotted or missing planking . . . poor Bill who is somewhat acrophobic. We made it to Darling Creek for another hot soup lunch; faces were elongated because we were not going to make it into Bamfield, but it would have been a long hike and we would have arrived long after dark to no purpose. We rested at Darling, washed in the creek and slept in the luxurious afternoon sun . . . had it made. Hiked up to Michigan Creek late in the afternoon and set up our final camp. The zenith of the evening was a bread . . . bread!! . . . that Jean concocted with some flour and baking powder found at Darling Creek. It was put together with imagination, small things left in our larder and wild things picked along the way. We improvised a Dutch oven for baking and made two, round, 1½-inch-thick loaves — one for dinner and a second for breakfast.

While out on the shelf photographing the boiler of the steamship Michigan, wrecked here on January 20, 1893, a helicopter flew low overhead and to my surprise put down at our camp . . . two men in slacks and shirt-sleeves walked out of the forest, got in and flew away. It was explained at camp that they were from Provincial Parks and were surveying sections of the trail to repair bridges, etc. Repair is needed and will make the trail considerably safer, for as more people hike the trail there will be accidents, and there are now some rather dangerous parts. More rain coming tomorrow.

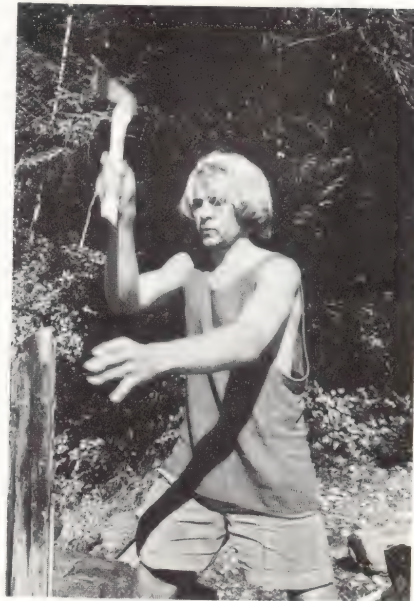


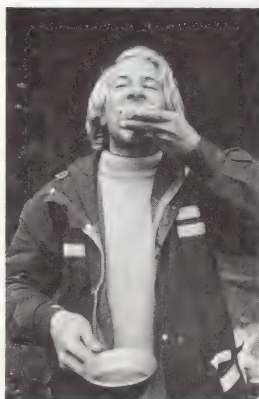
Tuesday, 9/19: Got up at 5:00 a.m. in dark to get across Klanawa during low tide . . . left cabin and waded stream in first light then hiked on beach with huge southern back-drop cumulus billowing behind us in pink and orange, silver light fringing the clouds and streaked in purples and blues in tidepools drawing out rich violets and purples of anemone, sea urchin, dogwhelk and turquoise chiton undersides, waving kelp and tiny minnows scooting about. Clouds becoming further and further behind us while sun rises into clear blue sky, rock shadows diminishing.

Stopped at driftwood shanty at Darling Creek for lunch (we're getting close to home at this point). Want to briefly mention the economy of these driftwood structures. Built on concept of "lean" and "balance," they utilize materials at hand plus primitive but stable structural methods. Plastic ground sheets often assist the roof in keeping out rain, but primarily the wood is placed as a support for a variety of settings for tarps and flies. The structure at Darling uses a drum stove consisting of a 55-gallon drum (of which the beaches here abound) with a hole cut at the bottom for the wood and another hole cut on the opposite side about ¾ of the way up for a flue. Scrap metal can usually be found to extend the flue outside of an enclosed structure like the cabin at Klanawa, but here, the stove forms one side of a small room, the backside facing out and driftwood piled up to keep the smoke out. A large plank bed has been built in one "room" of the place and in another section, someone has made two bedframes out of two by fours with an old fishing net used as a kind of hammock suspended within the frame. The only method for filling in holes left by large planks in walls or roof is to fit smaller pieces in or else continue piling and stacking until the holes are eliminated.

We spent quite a long time at Darling. Nick, Bill and I went up to a waterfall and washed up while Swanson fell asleep and everyone dozed or read in the sun. In late afternoon, we hiked another mile down to Michigan Creek (named after a ship that went aground in earlier days) where we camped for the night. Almost totally out of food, we threw everything together and made a big soup, and Jean made a wonderful bread out of flour, powdered milk, baking soda, some parsley that we'd saved and cardamom. She baked it in a makeshift dutch oven consisting of a bed of coals, a frying pan with the bread mixture covered with foil, a large pot lid with another bed of coals which was put over the frying pan. For breakfast, she made another bread, this time with blackberries and wild currants thrown in. The mixture is simple: two cups flour, one cup powdered milk, two tablespoons oil, ¾ to one teaspoon baking soda, dash of salt and then whatever ingredients are at hand . . . baked for half-hour to forty-five minutes.

Encountered two men from Provincial Parks flown in by helicopter and deposited right at our camp . . . checking on condition of bridges on trail with plans to strengthen and repair them as needed. Glad to see such attention to the trail since yesterday's and today's hiking took us across some pretty shaky suspension bridges and broken boardwalks. They seemed interested in keeping the trail itself "rustic" (their word) but wanted to secure some of the more dangerous spots. Tomorrow will be our last day . . . hoping for clear weather.





so - never tried tabasco, eh?





Wednesday, 20th September — Rained heavily the whole day — amazing that we stayed even partially dry. The trail was almost a highway; broad, fully cleared, with sturdy park-like bridges. We strode along at a fast pace, but had to stop frequently as this was our last opportunity to photograph. It was very slow for Nick because of the low light and the downpour. The troops were sullen and dark as the day — it was not a time for smiling. When we reached our vehicle we lined up for one final photograph — we looked like so many malignant, wet ragdolls. In the rain we stripped off our ponchos and packs and huddled, steaming, in the VW bus. We started up and drove over to Bamfield — three miles away — and luckily got a boat to take us across to the cafe. The weather was worsening and the wind gusted up into a real storm. As the boat sped across in the slanted, driving rain our trip came to its completion.



Wednesday, 9/20: Hiked in heavy rain along broad trail over well-made bridges with sturdy bannister-like railings. Stopped at Pachena Point Lighthouse to "sign up." Everyone edgy and dark with rain coming down consistently and heavily . . . Nick trying to take last pictures of us; getting no response but mute resolution. Stopping and starting, waiting for time exposure or light setting or refocussing, stamping around like horses returning to the barn. Stood in front of car parked at end of trail in downpour, unsmiling for final picture of trip, difficult to summon up levity at this point.

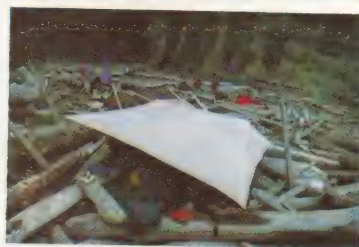
Drove into Bamfield and located water taxi to take us to the facilities on the other side of Bamfield Inlet. Headed for cafe and first meal off the trail. Ate double breakfast of bacon, eggs and potatoes, revived by warmth inside while wind and rain picked up on the outside . . . shortwave radio in cafe announcing various beached boats in first heavy storm of season, old salts tromping in in sou'westers and heavy overalls, ruddy faced and friendly having spent their morning securing boats and helping others in danger. Almost giddy feeling at release from trail, conversation and food and coffee and warmth combining to turn everybody on . . . the fishermen joining in, anxious to speak of their work and life in a world out at an edge, radio in background crackling the literal condition of the place.

Late afternoon, ferried back to car and drove (all of us still sopping wet) back to Port Renfrew over logging roads that go inland past Lake Cowichan and then back out to the coast at Renfrew. Sat in local bar listening to Johnny Cash and Merle Haggard tunes while drinking beer . . . switched cars and divided up the group to drive back to Victoria. Logging roads are restricted during the day so all car travel has to happen after 6:00 at night. Arrived in Victoria outskirts around midnight . . . motel room, shower, bed.









Sierra Designs products



Sleeping Bag Materials

Fabrics:

We use nylon ripstop material for all our sleeping bags. Ripstop nylon was developed for the sailmaker as a spinnaker cloth—it is not particularly better or stronger than other high-count nylons in respect to use for bags or clothing—but it is readily available, lightweight and can be woven to be downproof. We use 1.5 and 1.9 ounce weights. The 1.5 material is more expensive, but is 20% lighter.

Baffle:

We use a knitted, stretch nylon netting. It is very fine, light, strong, and will not unravel. It holds a stitch line so securely that we have picked up a 150 pound person who hung by the baffle material sewn in our normal construction manner. The baffle is extremely important, as it is the webbing which holds a down bag together.

Thread:

The lowly thread is important, too. We use a thread of Dacron core with a cotton wrap. This thread sews very uniformly and consistently. The cotton also helps to close needle holes to moisture due to its swelling when wet.

Zippers:

All of our zippers are made of Du Pont Delrin Nylon and manufactured by the Y.K.K. Zipper Co. of Japan, which is the world's largest and most advanced supplier of zippers. We guarantee our zippers against failure and have experienced very few failures due to inherent defects. Nylon zippers have become standard in the backpacking industry due to their trouble-free operation under extreme conditions.

Down:

Down is one of the most efficient and desirable natural insulators known. No synthetic material yet developed comes close to the softness, compressibility, breathability and favorable warmth to weight ratio given by down. However, one of the problems in using down is that it is very difficult to control the quality and character of the material, since climate, feed, terrain conditions and processing all have significant effects on the end product. With synthetics, the consumer has a fair idea of what he is buying, but with down he must rely on the integrity of the manufacturer to a greater degree.

Sierra Designs buys only quality goose and duck downs; we do not buy anything but the importer/processor's "prime" grades. We use no other term to describe our down—"prime" means the top commercial qualities available.

The image of a wild goose or duck flying over northern lakes is what we relate to the down filling in our sleeping bag or jacket. The truth is, however, that all the down used commercially is produced by flocks of domestic ducks and geese that are raised on farms in Europe, Asia and Canada as a food product. (The U.S. produces little water fowl down, since waterfowl are not traditional foods for the country as a whole.) Down and feather plumage is a by-product amounting to only 10 or 12% of the bird's value. The best down comes from northern countries simply because it is colder there and the bird needs a better coat to stay warm. Most commercial downs today are mixtures from different latitudes and countries. No manufacturer can tell you with complete accuracy where the down in your sleeping bag came from, but quality downs will have a high percentage of plumage from northern Europe.

Competition for the better grades of goose and duck down is very keen both abroad and in the U.S., and the cost is steadily rising out of proportion to all other materials used in sleeping bags and clothing. All down coming into our factory is tested on the basis of **filling power**. We use the methods and standards devised by the Federal Bureau of Commerce to test the quality and expected performance of waterfowl down. We also make a subjective judgment based on the general appearance and texture of the downs. The standards for our fills are:

Goose Down: filling power of 550cc per ounce. Duck Down: filling power of 500cc per ounce.

Equal weights of comparable goose and duck fills show the goose to be about 10% more efficient. However, the cost is over 20% greater. We use both goose and duck fills, depending on the end requirements.

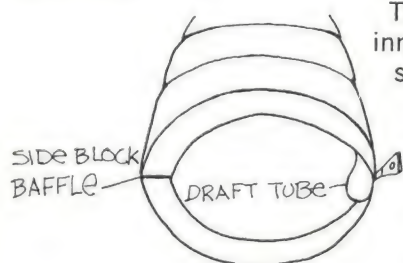
Mummy Bags: We use goose fill. These bags are designed for low-temperature use. We use the best quality fill even though the cost of finished product is high.

Other Sleeping Bags: We use duck fill in our Omni, Double Mummy, Fairsack and Footsack. These bags are for more general use. Goose fill would not greatly affect their utility or performance, but the cost increase would be considerable.

Down Clothing: All of our down jackets are quilted construction and we use a particularly fine, soft duck down filling. In a baffled sleeping bag or jacket great effort is put into making an optimum construction for the maximum lofting of down. However, quilted jackets can only have a given amount of loft because quilting compresses the down and there is no measurable difference in the performance of our goose or duck down in the jackets. We choose to offer a quality item where cost and performance are balanced.

Sleeping Bag Construction

Differential Cut:



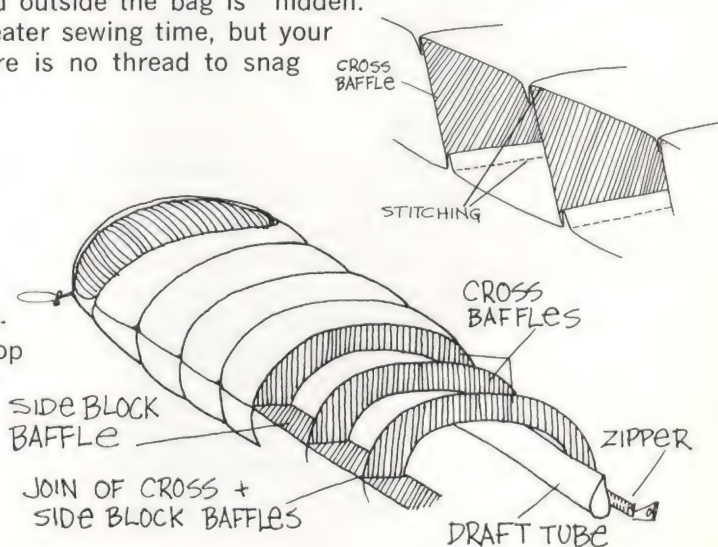
The idea of a sleeping bag is like a "thermos bottle" . . . you have an inner shell and an outer shell with a layer of insulation between. A sleeping bag is not a rigid construction and the insulating layer is not totally controllable, but the idea works in a similar way. We cut the inner shell smaller and separately from the outer, so that the sleeper—contained by the dimensions of the inner shell—does not push through the insulation. To complete the insulating layer, where it is broken at the zipper, we attach a down-filled draft tube that is not sewn through the shell.

Stitching:

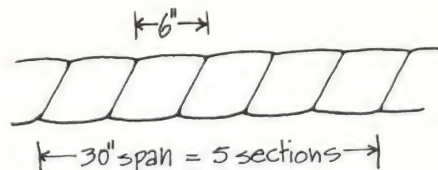
All our seams are very carefully stitched and reinforced at all stress points. All of the surface stitching across the baffle lines both inside and outside the bag is "hidden." This method requires more fabric and greater sewing time, but your bag will give longer service because there is no thread to snag or wear.

Baffle System:

Each compartment in our sleeping bags is completely set off from every other compartment. Baffles run across the bag forming the main fill tubes. These baffles join a side baffle running down the length of the sleeping bag and another baffle encircles the foot. Down cannot shift from top to bottom of the bag and it cannot shift to any adjoining compartment. We measure the down that goes into each compartment to within 3 grams accuracy, and we construct the bag so that the proper amount of down **stays** in that compartment.



We use a standard pattern for setting baffles to the shell fabric. Spacing is on 6" intervals, and the sew lines between inside and outside shell are offset 3". This partially overlaps one tube over another. It is an elastic, lightweight construction that allows maximum lofting of down.



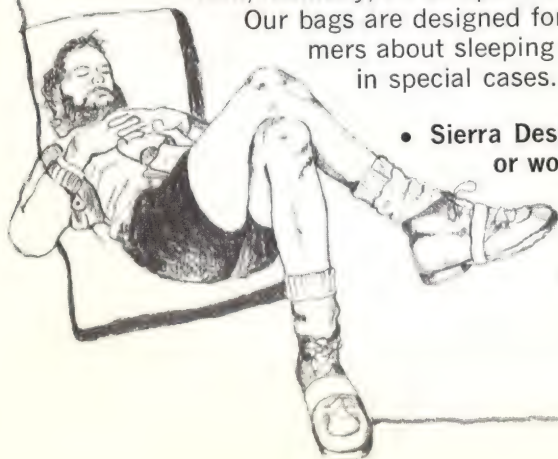
Sleeping Bag Specifications

Model	Size	Fabric per. sq. yd. (rip-stop)	Zipper Length	Fill	Fill Quant.	Total Weight	Girth Shoulder	Girth Foot	Length Inside Top	Loft/Est. Avg. Minimum Temp.
Superlight	Reg.	1.5 oz.	70"	Prime Goose	1 lb. 12 oz.	3 lbs. 4 oz.	57"	37"	78"	6"-7"/10°
	Lge.	1.5 oz.	70"	Prime Goose	1 lb. 14 oz.	3 lbs. 8 oz.	58"	37"	84"	6"-7"/10°
Two-Hundred	Reg.	1.9 oz.	70"	Prime Goose	2 lbs. 5 oz.	4 lbs. 7 oz.	62"	40"	77"	8"-9"/5°
	Lge.	1.9 oz.	70"	Prime Goose	2 lbs. 8 oz.	4 lbs. 11 oz.	63"	41"	83"	8"-9"/5°
Expedition (Outer)	Reg.	1.5 oz.	36"	Prime Goose	2 lbs. 5 oz.	3 lbs. 14 oz.	62"	40"	77"	8"-9"/5°
	Lge.	1.5 oz.	36"	Prime Goose	2 lbs. 8 oz.	4 lbs. 2 oz.	63"	41"	83"	8"-9"/5°
Expedition (Inner)	Fits Reg. or Lge.	1.5 oz.	36"	Prime Goose	14 oz.	1 lb. 10 oz.	59"	36"	81"	4"-5"/40°
Omni	Reg.	1.9 oz.	106"	Prime Duck	2 lbs. 4 oz.	4 lbs. 10 oz.	66"	57"	72"	6"/15°
	Lge.	1.9 oz.	110"	Prime Duck	2 lbs. 10 oz.	5 lbs.	65"	55"	85"	6"/15°
Double Mummy	One Size Only	1.9 oz.	70"	Prime Duck	3 lbs. 9 oz.	6 lbs. 13 oz.	98"	63"	75"	7"/10°

Loft/Temperature Range:

Although our specification table for sleeping bags gives figures for loft (thickness) and minimum temperatures, we do so with reservations. We do not believe that such figures are very meaningful, because measuring the range of conditions and variances between individuals is simply beyond our control. Temperature alone is not the only measure of "coldness"; individual metabolism, humidity, wind exposure and other factors determine how comfortably you will sleep.

Our bags are designed for Alpine use and it is rare that we have complaints from customers about sleeping cold; we have not found it necessary to offer overfills except in special cases.

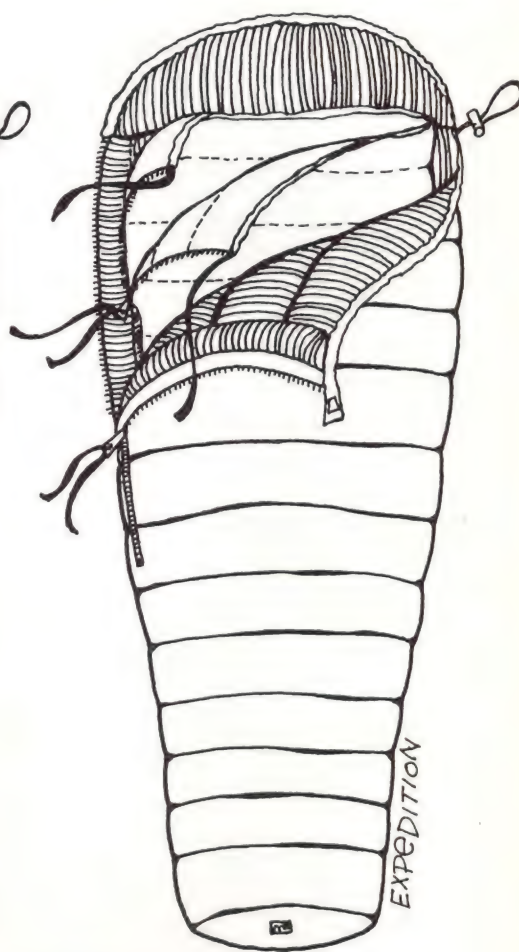
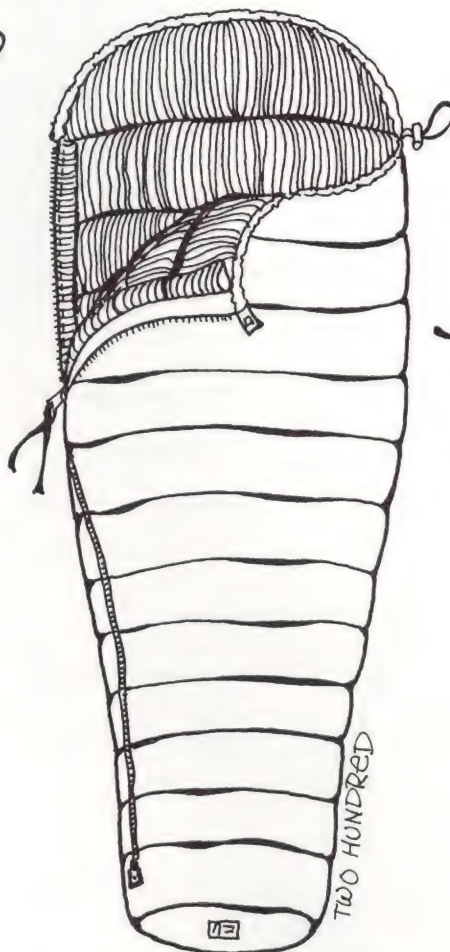
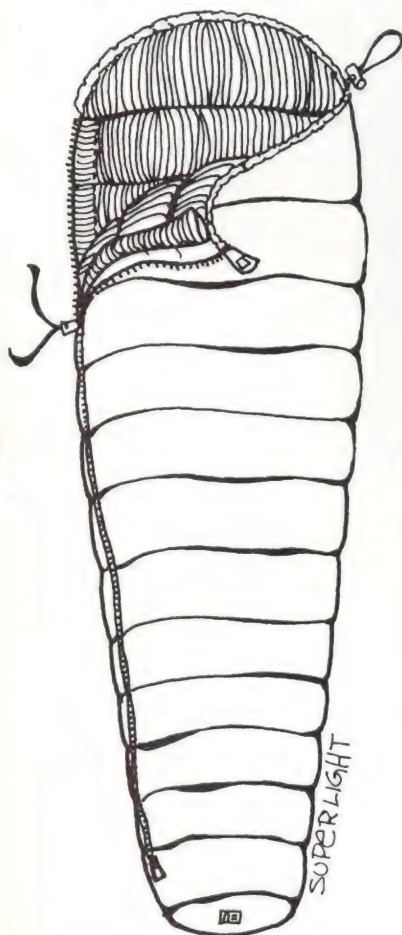


- Sierra Designs products are guaranteed to be free from defects in material or workmanship.
- Prices subject to change without notice.
- See page 60 for product colors.

Superlight

Designed for the mountaineer and backpacker who wants a very light, compact bag with the optimum ratio of warmth to weight. A year-round bag that is particularly good for winter mountaineering and ski-touring. The cut of Superlight is spare and we do not recommend it for large or heavy persons, or those who like to sleep spread out. See CONSTRUCTION/SPECIFICATIONS on page 44. This bag will mate with other Superlights or the Two-Hundred. Specify which side zipper when ordering a mate. 8x20" Stuffsack included.

COLORS: Blue or Jelly Apple Red. Insides of Tarragon.
Regular (Persons up to 6'): **\$ 95.50**
Large (Persons 6' and over): **\$101.50**



Expedition

It has been our feeling for some time that the usual "expedition" type of sleeper has been overbuilt, overweight and overrated. We include our former model #300. The usual low-temperature bag (minus zero conditions over extended periods) has a limited application and is not a particularly good investment for the mountaineer and backpacker who needs a sleeping bag for a variety of conditions. Our new Expedition bag can be used in a variety of weather and surpasses the former #300 for low-temperature use. The Expedition is two separate bags that may be used separately or together. The outer bag is a fully baffled, differentially cut sleeper in 1.5 oz. ripstop with a

Two-Hundred

By far, our most popular sleeping bag and rightly so. It will keep you warm in the winter snows, comfortable in all seasons, yet is lightweight and roomy enough to satisfy people who never believed they could sleep in a mummy bag. If you want a down-filled mummy bag that is superior in design, materials and construction, just read CONSTRUCTION/SPECIFICATIONS on page 44, examine a bag and make up your own mind. Will mate with other Two-Hundreds or Superlights. Specify which side zipper when ordering a mate. 10x18" Stuffsack included.

COLORS: Blue or Orange. Insides of Nutmeg.
Regular (Persons up to 6'): **\$111.50**
Large (Persons 6' and over): **\$118.50**

half-length side zipper. The inner bag is cut to fit properly inside the outer bag and is a light, quilted through bag in 1.5 oz. ripstop, and it has a half-length zipper. The outer bag can be used for most backpacking needs; the inner can be used in lowland camping and general summer use; and the combination can be used on your next Himalayan climb. CONSTRUCTION/SPECIFICATIONS on page 44. There is no provision for joining to make zip-together bags. The Expedition bags use non-separating zippers. 7x14" and 10x18" Stuffsacks included.

COLORS: Navy outer bag; Red inner bag.
Regular (Persons up to 6'): **\$162.50**
Large (Persons 6' and over): **\$176.50**



Omni

The Omni is the most generally useful sleeping bag we make. It is kind of like a Chevy . . . you wouldn't take it to the top of Everest or exhibit it at a "concours" of alpine equipment . . . but it just keeps running and is beautifully reliable and versatile. It is good for back-packing, river-touring, cabin use, overnight guests. It is warm as a single bag, a quilt, or when joined to another Omni it is a warm, enormous double. If you are into a number of outdoor activities and have to choose one sleeping bag to cover them all—you can't choose better than this. CONSTRUCTION/SPECIFICATIONS on page 44. Omni

will mate only to other Omni bags;

any Omni will join with any other Omni. 10x18" Stuffsack included.

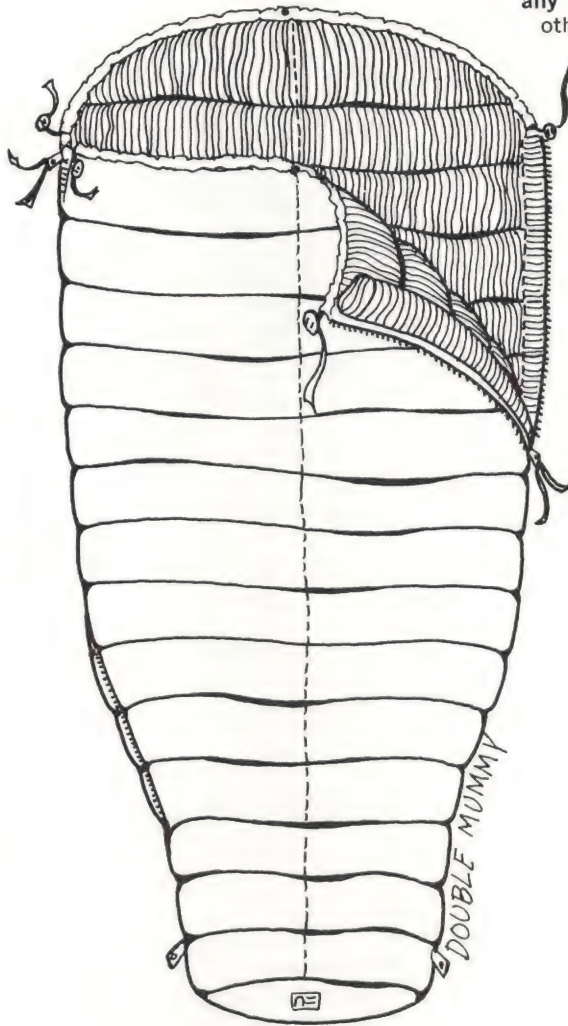
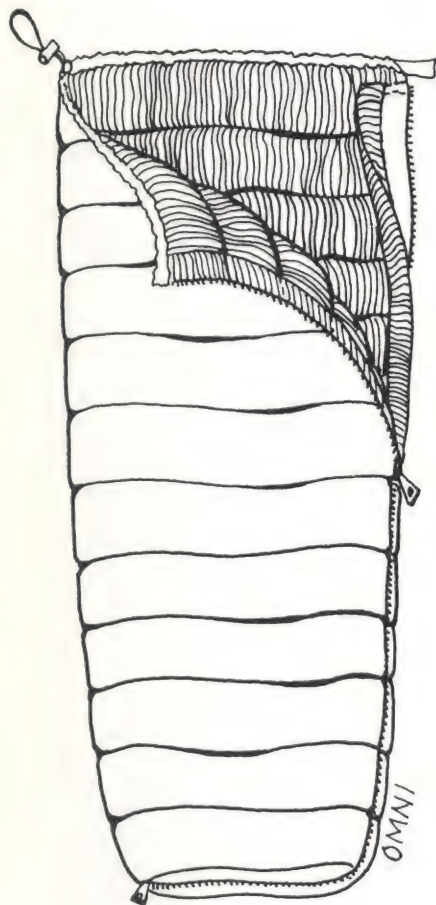
COLOR: Blue only.

Regular (Persons up to 6'):

\$97.50

Large (Persons 6' and over):

\$107.50



Footsack

A short bag used by mountaineers for sleeping out on ledges, snowbanks or your normally uncomfortable bivouac sites. It happens to make an excellent, lightweight sleeping bag for children up to 4½ feet tall. Fully baffled construction, differentially cut, no zipper, filled with 1 lb. of Prime Duck Down. Girth is 52" at top and 34" at foot. Comes with 7x14" Stuffsack and total weight is 2 lb. 2 oz.

COLORS: Blue or Orange.

\$55.50

Double Mummy

If your trips usually include a partner, then you should consider this bag. It is lighter, cheaper and more efficient than pairing single bags. It is the proper size for two persons, combining optimum thermal efficiency, with enough room to stretch out and move around independently. Each side has its own two-way 70" zipper. CONSTRUCTION/SPECIFICATIONS on page 44. 11x22" Stuffsack included.

COLOR: Blue only.

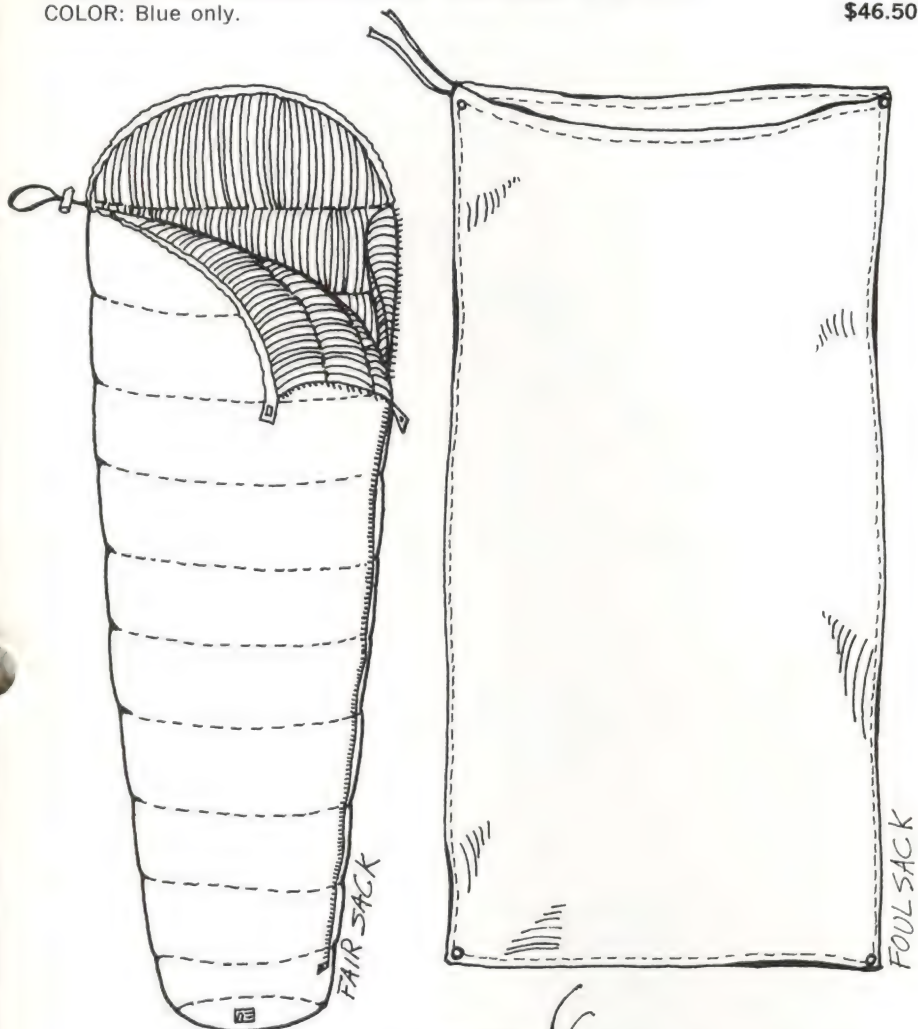
(Fits persons up to 6' 2"): \$149.50

Fairsack

For summer camping in mild temperatures. This is a very light bag of simple quilt-through construction that should keep you warm at 40° and above. Its light weight and compact size make it ideal for cyclists—combined with a cover or used in a shelter—it should be great for general summer alpine camping. Fabric is 1.9 oz. ripstop nylon. It is filled with Prime Duck Down and quilted through. There is a 70" #5 coil zipper and one size fits persons up to 6' 2". Fill weight 1 lb. 9 oz. 7x14" Stuffsack included. Total weight 3 lbs. 2 oz.

COLOR: Blue only.

\$46.50



Foulsack

A sleeping bag cover or emergency bivouac sack. One side is coated nylon and the other is breathable 1.9 oz. ripstop. Can be used as cover for any sleeping bag to increase warmth and protect against snow, wind, etc. Foulsack measures 93x43" and has a drawcord top and spur grommets set at each corner for tie-downs. Weight is 1 lb.

COLORS: Blue, Green, or Orange.

\$12.50

Stuffsacks

Made of 3½ oz. waterproof nylon. One-piece construction with square bottom.

#001 — 4x8	. . . . .	\$1.40
#002 — 6x11	. . . . .	\$1.40
#003 — 7x14	. . . . .	\$1.65
#100 — 8x20	. . . . .	\$1.90
#200 — 10x18	. . . . .	\$2.05
#300 — 11x22	. . . . .	\$2.65

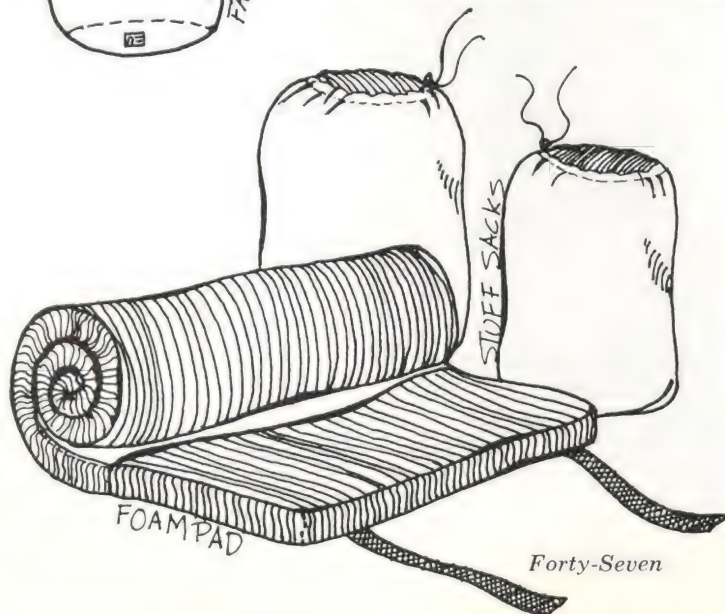
Foam Sleeping Pad

It is essential to use an insulating pad with your sleeping bag and we believe the poly-foam pad in a removable fabric cover is the best type to have. Foam is 2" thick high density polyurethane. Cover can be removed for cleaning or more insulation can be inserted if desired.

Top of cover is cotton (nylon pad tops are too slick for nylon bags) and the bottom is coated nylon. We now make only one size—that which has proved to be the most useful and desirable. 54" long x 21" x 2" and rolls to 6" diameter.

Weight: 2 lbs.

\$11.00



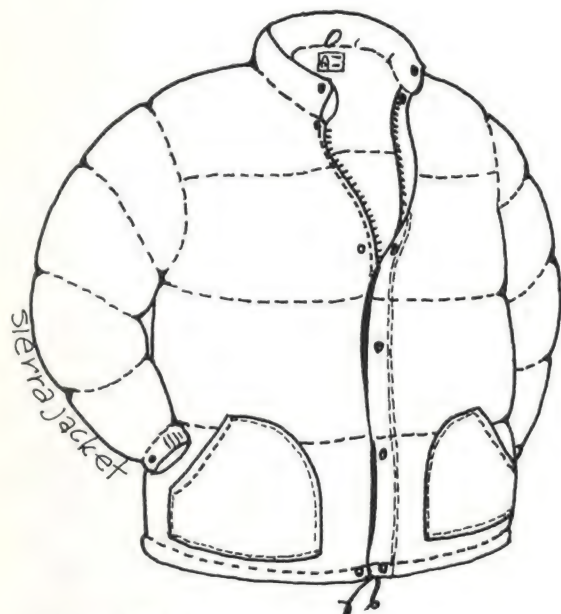


Clothing

All of our clothing has been developed from our own designs and patterns. We make constant revisions to gain better performance, durability, and appearance. We take particular pride in the details of construction and in producing a finished garment that we respectfully invite you to compare with other makes. Our down-filled, insulating clothing and our overshell garments work extremely well together or separately. Multi-layer clothing (rather than one thick or heavy garment) allows combinations to be made quickly and easily for the greatest protection and comfort in extremes of weather.

DOWN CLOTHING SIZES (all jackets and vests):

X-Sm. (32-34); Sm. (34-36); Med. (38-40); Lge. (40-42); X-Lge. (44-46).



Sierra Jacket

A very light, warm, waist-length jacket that is the ideal for the outdoor activist. A truly useful jacket for backpacking, ski-touring and mountaineering. This jacket closes with a nylon zipper that is covered with a snapped-down storm flap. Collar is 2" high and down-filled. There is a drawcord bottom, adjustable elastic-snap combination cuffs, a pair of insulated hand-warmer pockets, and an inside goggle pocket. Fabric is tough, high-count Supernyl, quilted, with Prime Duck Down fill. Comes with 6x11" Stuffsack.

Avg. down fill: 7 $\frac{5}{8}$ oz. Avg. total wgt.: 1 lb. 6 oz.

COLORS: Navy, Green, Cranberry.

\$38.00



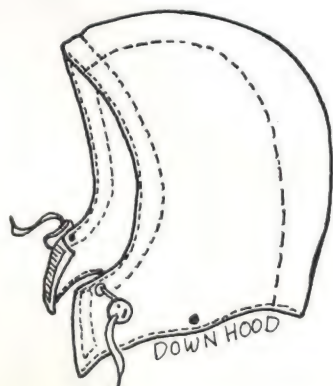
Whitney Parka

Basically the same type of parka as the Sierra Jacket, but with additional features. It is styled with a raglan sleeve and is cut four to five inches longer than the Sierra. All of the details listed for the Sierra are identical on the Whitney with the addition of double pockets on the front. The main pocket has a Velcro flap closure and the pocket behind is an insulated handwarmer pocket. The Whitney has a certain rustic stylishness that lends itself to general town wear as well as use in the field. Comes with 7x14" Stuffsack.

Avg. down fill: 9 $\frac{3}{8}$ oz. Avg. total wgt.: 1 lb. 11 oz.

COLORS: Navy, Green, Cranberry.

\$46.00

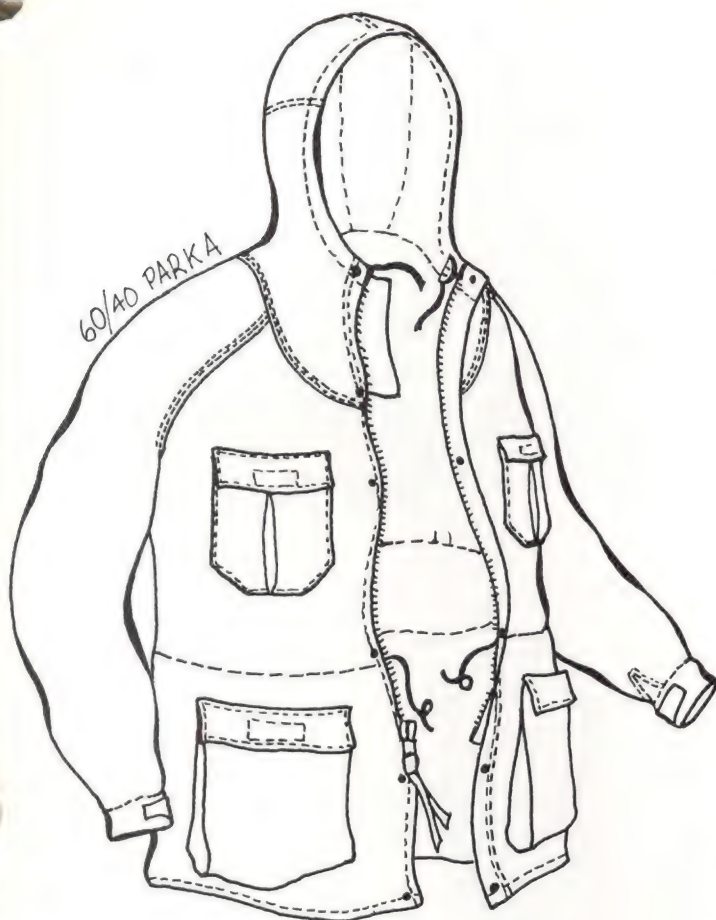


Down-Filled Jacket Hoods

All of our jackets come with snaps in place for attaching the optional hood. Hoods are down-filled. Please specify jacket MODEL, SIZE AND COLOR if not ordered with jacket.

SIERRA OR WHITNEY HOOD **\$8.00**

INYO HOOD **\$9.00**



60/40 Mountain Parka

Since we started making our 60/40 parka over five years ago, almost every competitor in the backpacking field has emulated it; even the name we made up to describe the fabric and parka has become a common name for this type of parka. 60/40 cloth is a blend of cotton and nylon, respectively — this combination brings together nylon's lightness and durability with the "feel" and water repellency of cotton. The 60/40 parka is a handsome and functional piece of gear. All principal seams are double-needle folded, reinforced at stress points. The front zipper is a heavy-duty #10 size in nylon, which is covered over by a flap with a secondary closure of snaps. The parka is fully lined and has four large pockets on the front — all closing with Velcro, which is durable and can be operated easily with gloves or mittens on. Entire rear of parka from waist to neck is a large, zippered pocket for carrying a sweater or other large items. The cuffs have gussets in them and fasten with Velcro; they can be belled wide open for ventilation or closed tightly — with mittens on. Hood is made in four pieces and the hood drawcords and leather sliders are placed on inside facing, so the loose ends will not whip the face in a high wind (which is generally when you have your hood up). A flap is sewn un-



Inyo Parka

The Inyo is not so much meant for mountaineering use as for general winter wear. It is an excellent combination of warmth and toughness with minimal weight. The smooth outer layer is 60/40 cloth — a blend of 58% cotton and 42% nylon. It is along wearing, wind-tight fabric that is fairly water-repellant and due to the high cotton content can be re-waterproofed much better than all nylon. Under the 60/40 is a separate quilt of high-count Supernyl filled with Prime Duck Down. Front zipper is a heavy-duty #10 nylon which is covered by an insulated snap-fastened flap. All construction details are the same as for the Whitney/Sierra parkas with the addition of adjustable Velcro closed cuffs. **No Stuffsack.** Avg. down fill: 9 $\frac{3}{8}$ oz. Avg. total wgt.: 2 lb. 8 oz. **COLORS:** Navy, Green, Orange **\$67.50**

der zipper at throat, so slider and teeth will not contact skin when hood is up and parka is fully zipped.

This year we have made an important improvement in the construction of our parka. The full lining is now made in two fabrics: the lower half in nylon as before — but the upper part is now made of an extremely tightly woven and fine Egyptian cotton. This is what the British call Ventile cloth (although this cotton did not pass through the British Isles on its way here) — a superb cotton woven with a tight twist in the yarns. It is remarkably water-repellent. The hood, shoulders, chest, back and upper arms will now get additional protection from rain or snow soaking through. It adds some weight and expense, but then you might only buy a parka like this once in ten years, so if you want a proper 60/40, you should examine the original — **ours.** Avg. wgt.: 1 lb. 14 oz. **SIZES** (Parka is cut large to go over down clothing): X-Sm. (34-38); Sm. (38-40); Med. (40-42); Lge. (42-44); X-Lge. (44-48).

COLORS: Navy, Green, Orange.

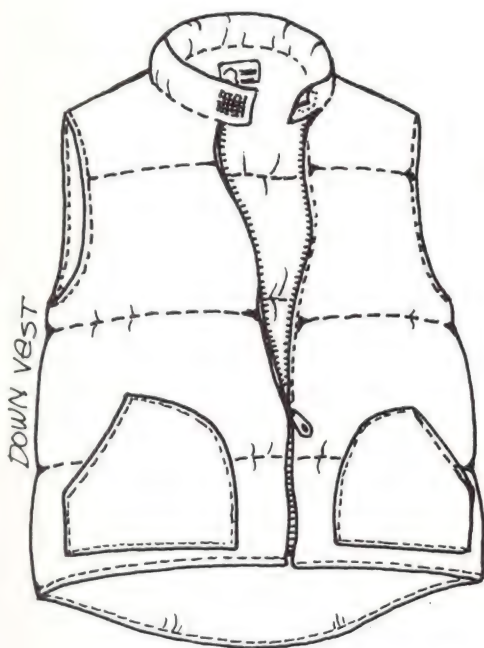
\$42.00

Down Vest

The down vest combined with wool shirts, sweaters or overparkas gives great warmth for very little cost in weight or dollars. The vest allows great freedom of movement and is favored by those engaged in very active outdoor activities. Vest is waist length and cut 3" longer in back. The vest closes with nylon zipper and has a pair of insulated pockets. Comes with 4x8" Stuffsack. Avg. down fill: 37/8 oz. Avg. total wgt.: 12 oz.

COLOR: Cranberry only.

\$23.00

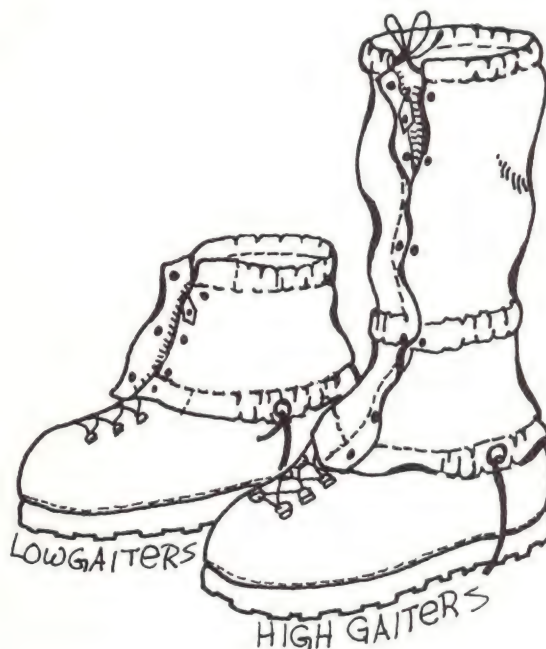


Gaiters

Gaiters keep snow, rocks and splash out of your boot-tops, and your feet stay warm, dry and comfortable. Our gaiters are made of 7 1/2 oz. nylon pack duck with a waterproof coating. Front is zippered, and covered with a flap that snaps shut over zipper. Gaiters are elasticized both top and bottom and have a hook at bottom of zipper for attaching to boot laces.

COLORS: Blue or Orange.

High Gaiter (16") 8 oz. **\$12.50**
Low Gaiter (7") 6 oz. **\$ 8.00**



Down Booties

For cold-feet people. Most useful in tents, sleeping bags, or very limited trips around camp. Down filled; sole insulated with ensolite foam. Bottoms and lower sides of coated nylon. Wgt.: 4 oz.

SIZES: Sm. (5-7); Med. (8-9); Lge. (10-11); X-Lge. (12-14).

COLOR: Usually startling.

\$10.00



Waterproofing

We would like to give you our thoughts on how to interpret the magic word "waterproof," for as backpackers we know we will eventually get caught out in the rain or snow, and for many of us the experience is frequent.

Now when it comes to clothing, the closest thing we know to really waterproof gear is yachting foulweather stuff. And then only the **best** double coated, machine sealed seams — expensive, heavy stuff — keeps out the worst of the weather.

The lightweight fabrics we use are laboratory tested to qualify for "waterproof" . . . a certain amount of pressure on a given area over a specific time tells us so. O.K.

If you stay out in the rain long enough you are going to get wet — what you are doing and what you are wearing under your raingear will make a difference. The point is . . . raingear serves to keep off the worst until you can get the hell out of the rain. Water will come in at the neck or face, sides of a poncho, splash up under the bottom, come through the seams (painting on seam sealant helps) or be forced through the fabric sometimes . . . e.g., by pack straps if pack is worn over the gear.

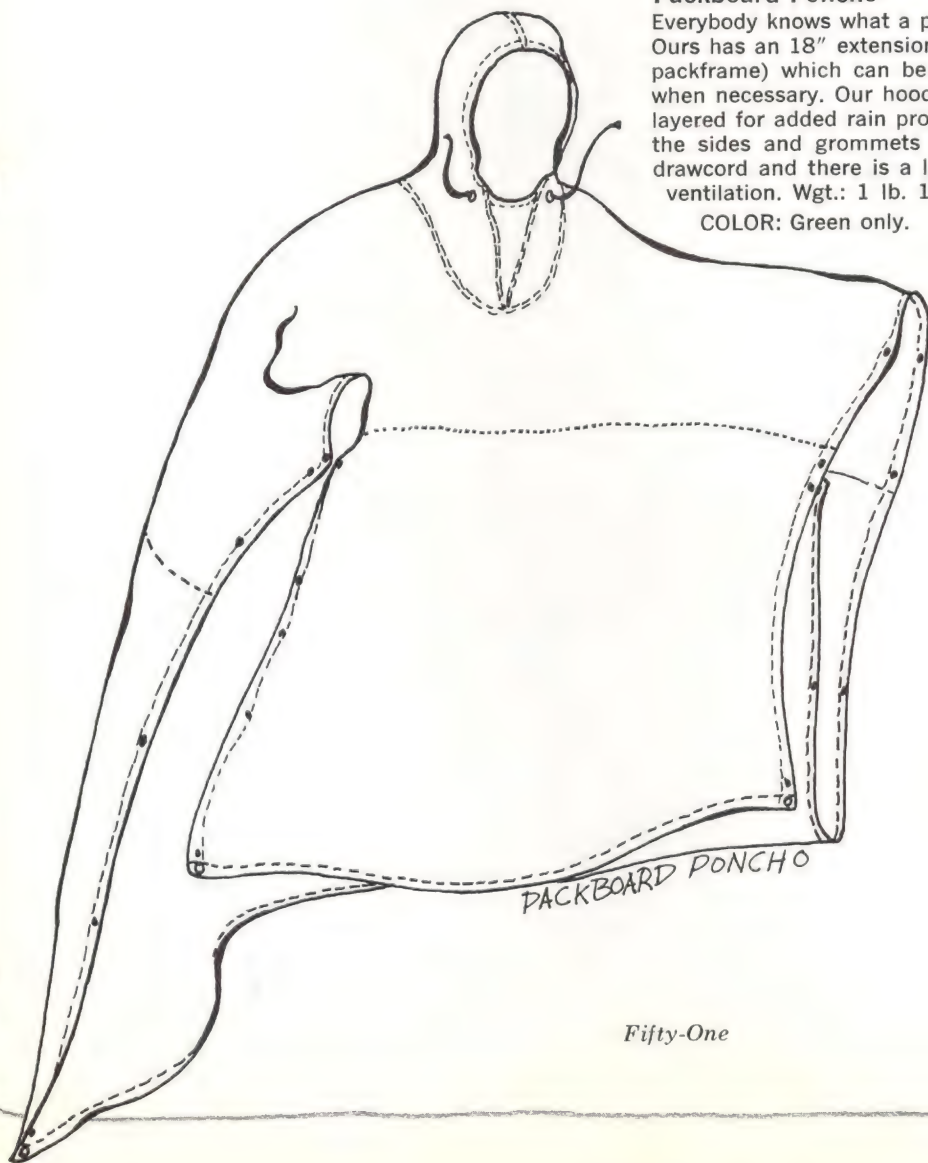
Things that help you stay dry are to wear something soft and absorbent under a poncho — a light wool shirt will feel dry and stay drier under the rain layer than a thin cotton one. Try not to exert yourself to the point where you sweat profusely — raingear does not breathe and much body moisture will condense inside around the upper body. Try to keep the raingear loose . . . a tent flysheet works so well because it is kept away from the tent wall and only has to shed.

Packboard Poncho

Everybody knows what a poncho is and what it looks like. Ours has an 18" extension on the back (for use with a packframe) which can be snapped up to standard size when necessary. Our hood and upper body area is double-layered for added rain protection. There are snaps down the sides and grommets around the edge. Hood has a drawcord and there is a large gusset at the throat for ventilation. Wgt.: 1 lb. 1 oz.

COLOR: Green only.

\$22.50



Climber's Cagoule

The cagoule is a very large, loose fitting parka. It is as long as a poncho and cut as wide at the hem, however it is drier than a poncho because there are no side openings. But a cagoule is not very satisfactory for any strenuous activity for it would be like taking a steam bath. It makes a good bivouac or camp garment because it sheds wind, rain and snow, fits over down clothing and adds great warmth because all the body heat is trapped by the coating. Urethane coated nylon is double layered throughout the upper half of body. There is a single Velcro closed pocket on the front and a drawcord at the bottom. Wgt.: 1 lb.

SIZES: Med. (for medium or smaller) and X-Lge. (for all others).

COLORS: Green or Orange.

\$27.00



Rainchaps

Frankly, we always thought rainchaps were for churls, but one trip to British Columbia — walking through wet salal — changed our thinking. They take up the space of a large bandana, and if you only use them once a year — they are worth it. Wgt.: 4 oz.

COLOR: Green only.

\$6.00

Mountain Tents

An efficient, lightweight shelter can add immeasurably to one's comfort and safety while traveling in wilderness areas. The proper tent provides privacy, warmth and protection against the weather. Our tents have been used in the most trying mountaineering situations and they hang together.

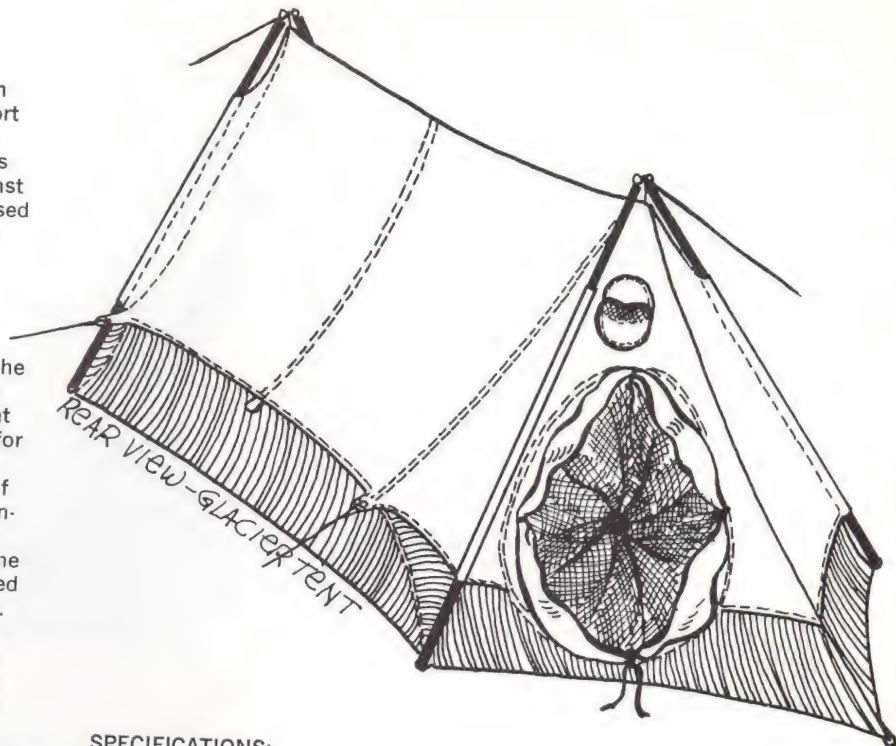
Glacier Tent

We don't mind saying this is one of the best two-man mountaineering tents around. Apparently many Glacier tent owners don't mind saying so either, for we get more complimentary letters about this tent than any other item of equipment we make. Tent has two entrances: a tunnel door at alcove end, and a two-zipper, triangular door at the front. Both entrances are fully screened for insect protection in warm weather. There is a 38" zippered cookhole at alcove end with a tunnel vent above, so there is ventilation when doors are closed. There is a net pocket attached to walls at each end of tent for small items. Main walls are sewn on 1.9 oz. ripstop nylon. Lower walls are 12" high and made of Polymer coated nylon for waterproofness and strength. Floor is of same coated fabric and is one piece from front wall to alcove line. Tent comes complete with pegs, flysheet, poles and all guys.

COLORS: Blue, Green, Orange.

(See page 57 for more details)

\$142.00



SPECIFICATIONS:

Pole Weight: 1 lb. 9 oz.

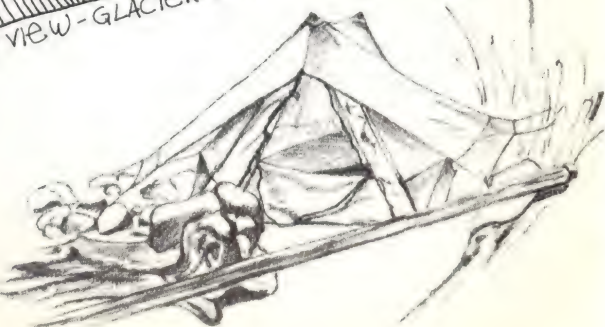
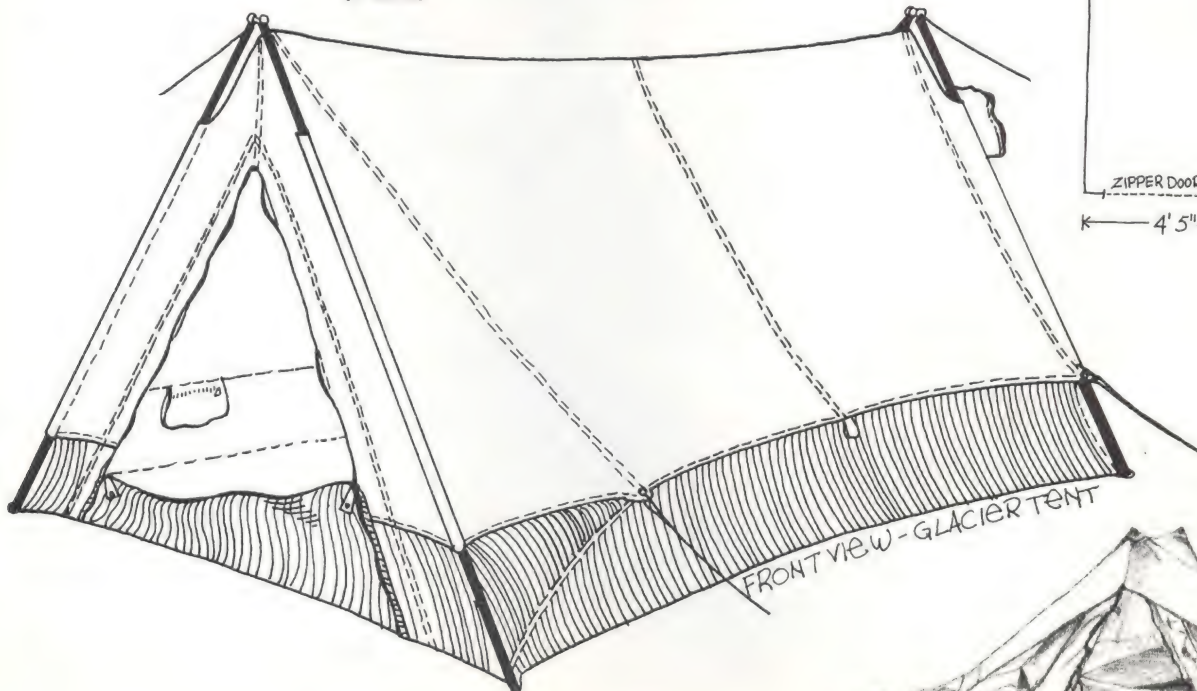
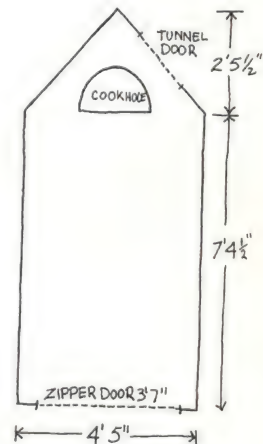
Fly Weight: 1 lb. 2 oz.

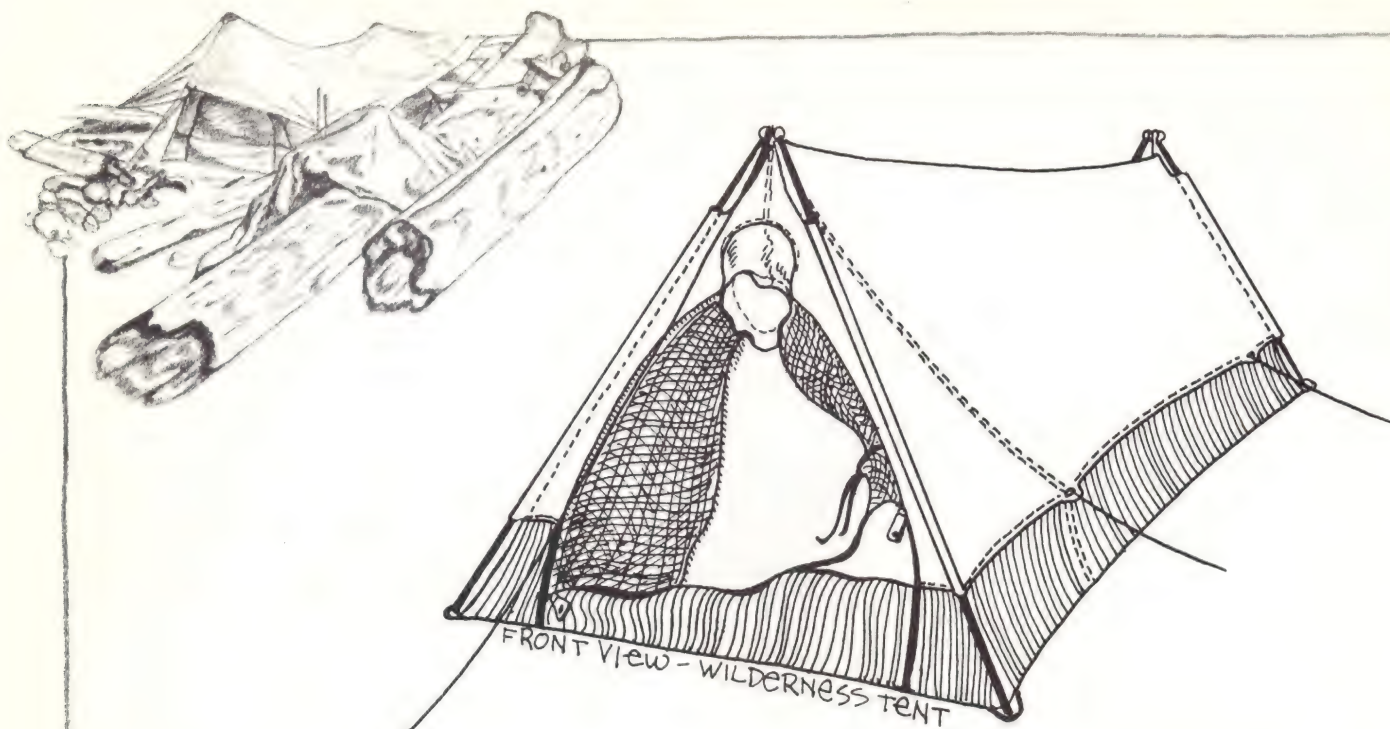
Tent Weight: 3 lbs. 12 oz.

Total Weight: 6 lbs. 7 oz.
(Complete with pegs, etc.)

Height: 45".

Packed Size: 8x18".





Wilderness Tent

A rugged, lightweight two-man backpacking and mountaineering tent. The Wilderness is an economical and classic design, which we make with the best in materials and quality construction. This tent is not just for fair-weather use or summer backpacking, but is made to stand up under winter storm and snow. The entrance is a large arch-shaped door with a two-way zipper closure, and behind the door is a zippered screendoor. A tunnel vent is set over the entrance and in the rear panel opposite is a 38" zippered and screened window. Main walls are 1.9 oz. ripstop. 12" high lower walls and one-piece floor are Polymer coated for waterproofness and strength. 38" zippered cookhole is set in floor at door end. Tent comes complete with pegs, guys, flysheet and poles.

* WILDERNESS TENT MAY BE ORDERED WITH TUNNEL ENTRANCE, BUT ALLOW UP TO ONE MONTH DELAY.
(See page 57 for more details)

COLORS: Blue, Green, Orange.

\$112.00



SPECIFICATIONS:

Pole Weight: 1 lb. 8 oz.

Fly Weight: 15 oz.

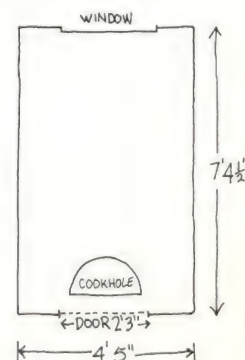
Tent Weight: 3 lbs.

Total Weight: 5 lbs. 7 oz.

(complete with pegs, etc.)

Height: Rear 36", Front 45"

Packed Size: 8x18".



Three-Man Tent

A lightweight tent with particular appeal for back-packing families. We call this a three-man tent, but wish to emphasize that it is not tied to that number or gender. We have used it so often for parties of four that we can safely tell you it will accommodate four persons with reasonable comfort and some crowding. Not a few persons have bought it as a two-man tent, in which case it is luxurious and still only a pound heavier than our two-man models. This is a six-sided tent with a tripod pole arrangement—light, yet stable. The entrance is large and closes with a pair of nylon zippers; behind door is a mosquito door—also zipper closed. For ventilation with door either open or closed there are a pair of vents in the peak plus two screened and zippered windows set in the lower walls. In the center of tent floor is a 38" zippered cookhole. There are net pockets set at top of lower sidewall to hold small items such as glasses, knives, etc. Main tent walls are 1.9 oz. ripstop nylon and the lower walls (12" high), along with floor, are waterproof polymer coated nylon. Tent comes complete with pegs, guys, flysheet and poles. (See page 57 for more details.)

COLORS: Blue, Green, Orange.

\$159.50

SPECIFICATIONS:

Pole Weight: 2 lbs.

Fly Weight: 1 lb. 6 oz.

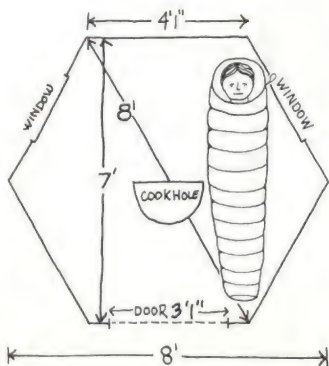
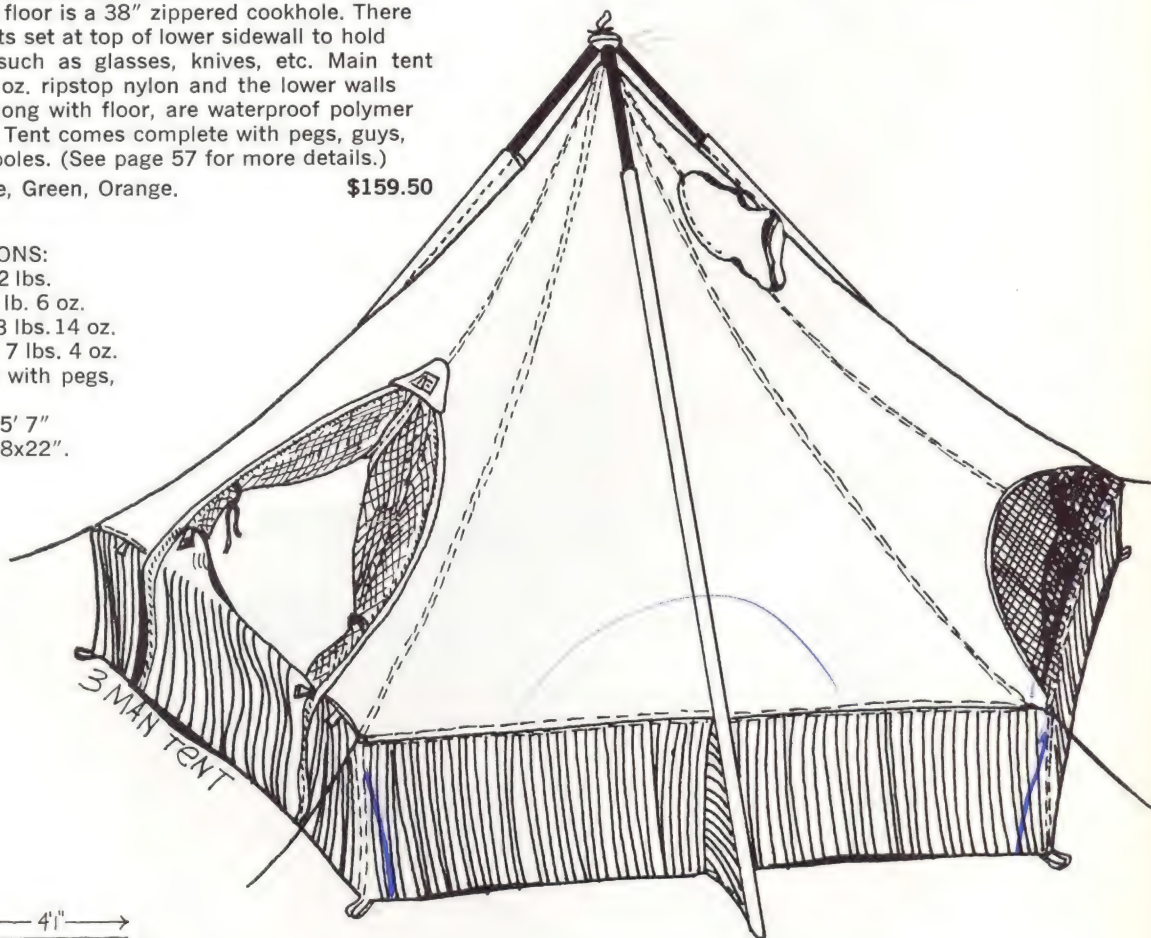
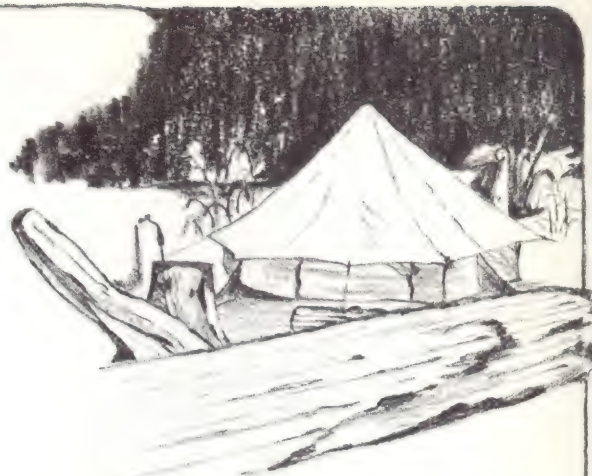
Tent Weight: 3 lbs. 14 oz.

Total Weight: 7 lbs. 4 oz.

(Complete with pegs, etc.)

Height Peak: 5' 7"

Packed Size: 8x22".



Frost Liners

Colors: White only.

Glacier: Weight: 1 lb. 8 oz.

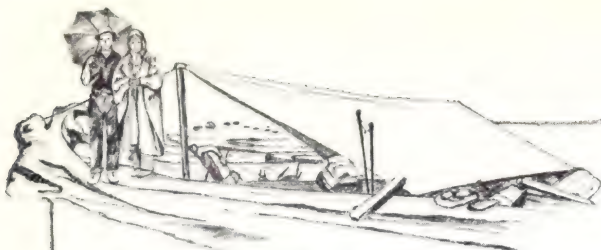
\$20.00

Wilderness: Weight: 1 lb. 8 oz.

\$16.00

Three-Man: Weight: 2 lb. 7 oz.

\$23.50

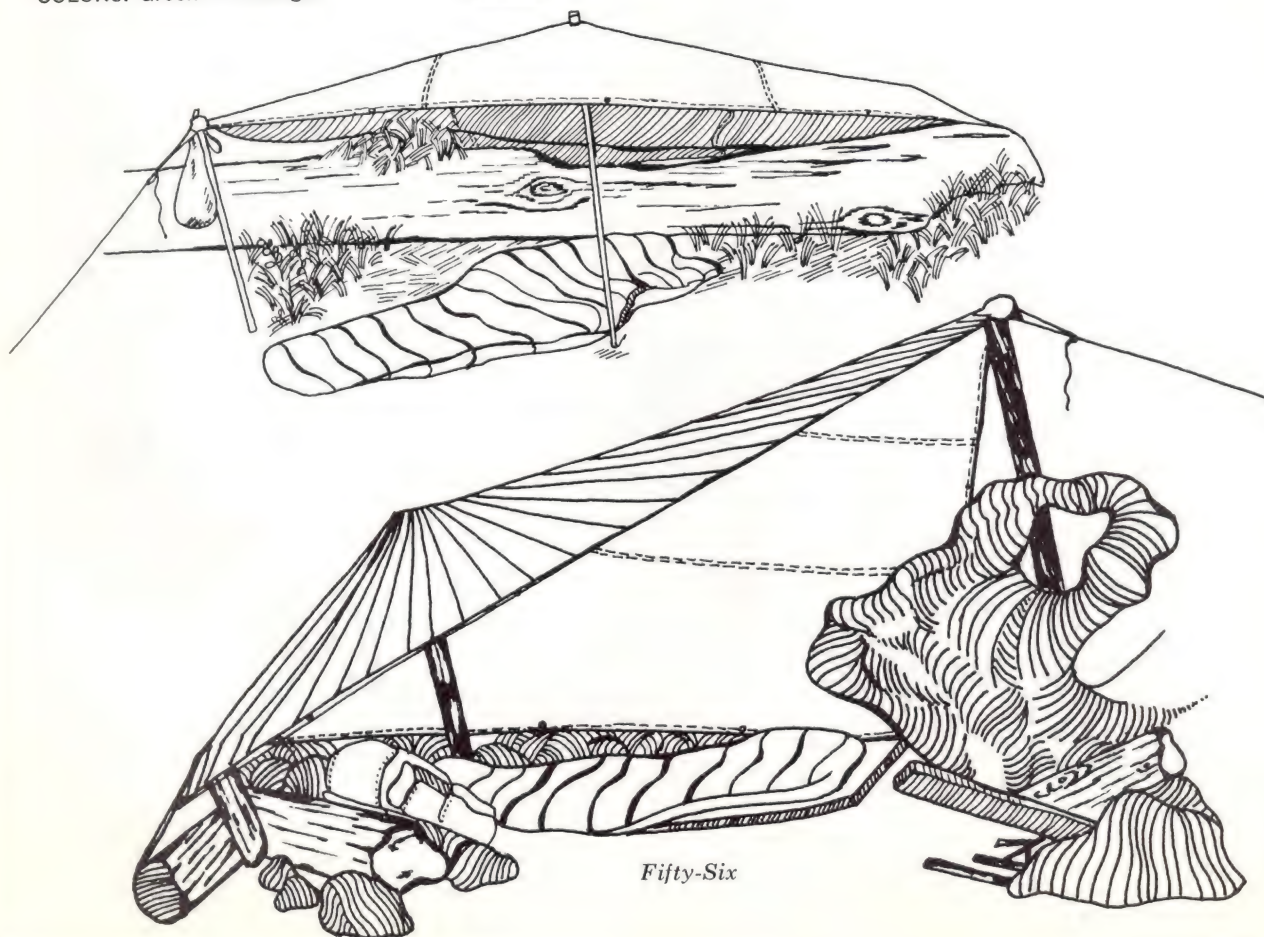
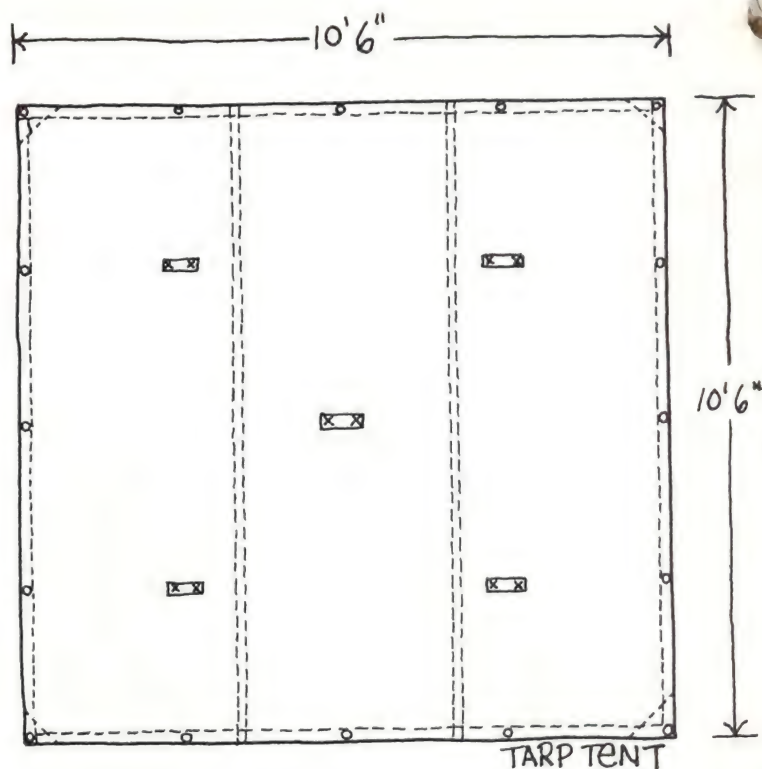


Tarp Tent

We cataloged our tarp tent a few years ago, but the response was not overwhelming. We realize that this was because a "tarp tent" is very difficult to visualize—it having no particular shape. However, even though we have not cataloged, nor had in production, a tarp tent—the staff of Sierra Designs and their friends are constantly using them and asking that we make one for somebody or another. The tarp tent is something that you must use to really appreciate, and it is an item of equipment that has a really hard-core group of enthusiasts. The beauty of the tarp is that it can be made into any shape to fit the circumstances. You need not carry poles either, as support is always at hand—support the center with an overhead branch, use rocks, etc., at the perimeter. There is no insect protection with the tarp tent, but if you need insect protection, you can easily add a mosquito bar around three or four sides. The Tarp Tent can accommodate two people or six, pitch it with lots of air blowing through or snug it down—it measures 10½ feet square, has five ties on the body of tarp and 16 spur grommets set on the edges. The weight is 2 lbs. and it comes in a carrying sack along with tie cords. Fabric is waterproof coated Nylport.

COLORS: Green or Orange.

\$32.00

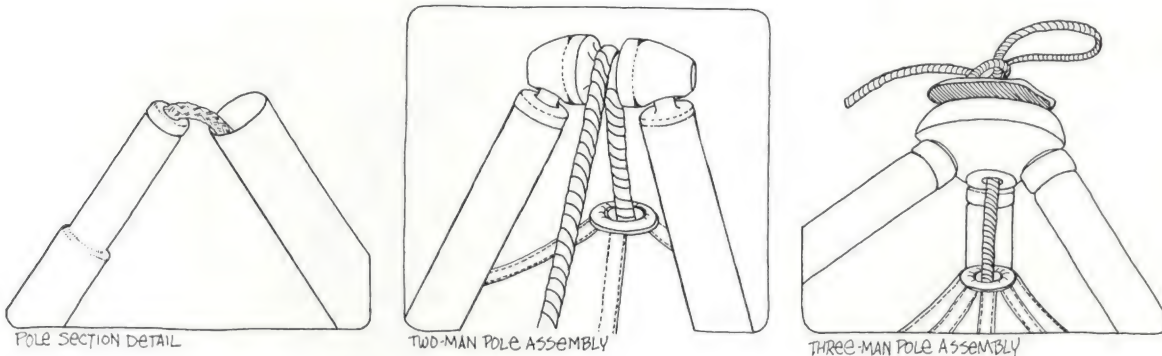


Tent Components

Described below are the various parts that make up our tents.

Poles

All of our poles are aluminum alloy of aircraft quality. Our poles are expensive and first rate quality. They are shock-corded for quick erection and there are no parts to get separated or lost. Should poles need repair or cords need replacement, it can be done without scrapping a pole. Cord is held in place with threaded fittings. Top joints are beautiful, functional, very strong. These poles are made exclusively for us by a mountaineer who is an engineering genius.



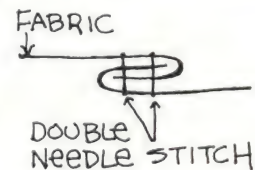
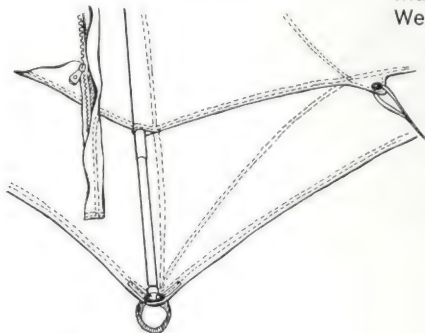
Materials

We use 1.9 oz. nylon ripstop for all our tent walls. It proves to be the best presently available fabric for the purpose. Light and with a reserve of strength and abrasion resistance that ensures endurance. We use a 2 oz. nylon for lower walls and floors. It is coated with a Polymer film. The Polymer coating is waterproof and is about 25 - 30% stronger than fabric coated with polyurethane. All the zippers used in our tents are Y.K.K. Delrin Nylon. We use #10 and #5 chain sizes. They have proven to be excellent in their operation and strength.

Sewing

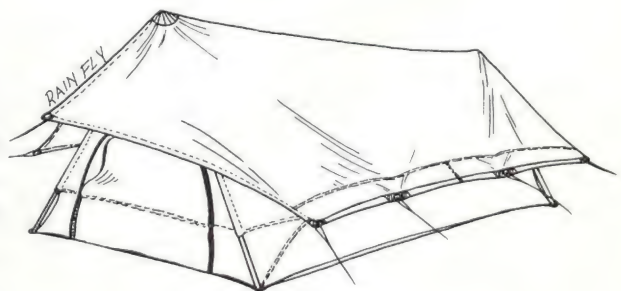
All of our tent walls have double-needle, lap-fold seams. There is no stronger way to sew them. Cheap tents may have 4 - 5 stitches per inch; our tents all have 8 stitches per inch.

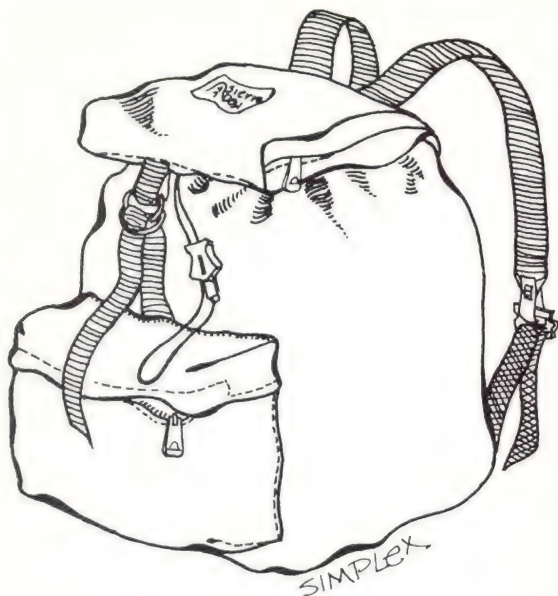
We cut all our tent walls with "catenary cuts"—a long, shallow curve along the edge of the fabric—this is what takes the sag out. Our tents get a little better each year, for we are always adding a detail here, improving a thing somewhere else. Making good tents is one of our biggest challenges, and the design of new and better tents is one of our more interesting projects.



Flysheets

All of our tent rainflies are made of a 1.2 oz. ripstop nylon with a Polymer coating for waterproofness and strength. Our flies are costly, light and strong. They are not of postage-stamp cut, but fully overlap the waterproof lower walls of the tents for maximum rain protection.





Simplex

A light, inexpensive pack for knapsacking or bicycling. Fabric is 7.5 oz. coated nylon. Zipper pocket on lid and one at rear. 2" wide unpadded shoulder straps. Overall size: 10x6x13½". Weight: 11 oz.

COLORS: Blue, Green, Orange (give alternate color). **\$10.00**

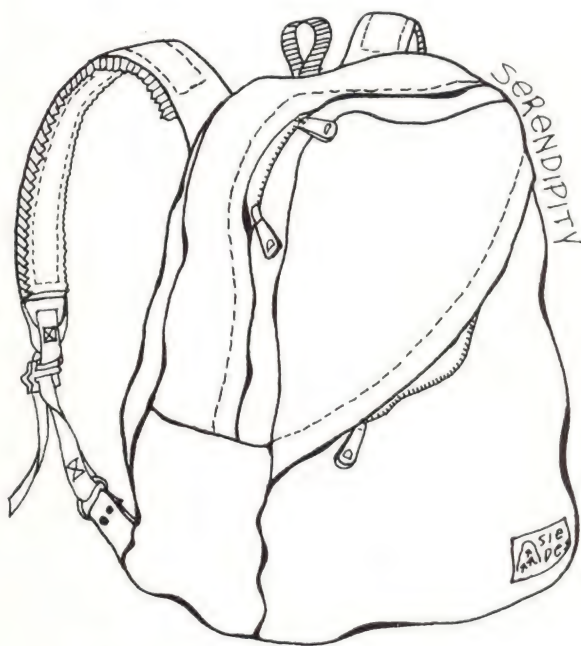


Daytripper

The classic small pack for day use. The wedge shape allows complete freedom of movement and pack lies close and snug to the back. The pack is divided into an upper and lower compartment. The smaller upper compartment is handy for smaller items, but is large enough to carry two 35 mm. cameras, film, etc. The lower compartment opens completely with a two slider zipper—you can get large things in and out easily and the design places no strain on the zipper as with horizontally placed zippers. The same materials and accessories (except ski carriers) used in the Summit pack apply to Daytripper. Overall size: 19x10½x6½" bottom with taper to top. Weight: 1 lb. 12 oz.

COLORS: Blue, Green, Orange.

\$21.50



Serendipity

It means . . . "the faculty of making happy and unexpected discoveries by accident" . . . and we think it suits our new pack. Serendipity is a small plain pack that will surprise you with its carrying capacity. It will hold all you need for a day's outing: food, books, cameras, sweater, etc. A zipper pocket across the face of pack allows you to separate small items, and on the bottom are two accessory strap patches for tying on parkas, tripods, tarp, or the like. This pack will particularly interest the student because a full load of books will fit in easily. The pack is made of tough, coated 11 oz. Cordura nylon, which will outwear all the conventional pack fabrics commonly used. Shoulder straps are padded and pack comes with two 24" accessory straps. May your next outing be "serendipitous." Overall size (bottom): 15½x12x5¾". Weight: 1 lb.

COLORS: Blue, Green, Orange.

\$14.50

Summit

This is a medium sized pack of a type most useful to the ski-mountaineer or climber. The shape and proportions of the pack allow it to ride close to the back and under control, giving the wearer ease and freedom of movement. It can be both a joy and a challenge to travel with a modest size pack, and the Summit is suitable for overnight trips by an experienced and resourceful person. Light things such as parkas, ponchos and sleeping pads can be strapped underneath the pack where carriers are provided. A Superlight sleeping bag and half of a two-man tent can be carried under the lid, with the remaining gear going inside and among the three pockets. The lid pocket is 8x10 $\frac{1}{2}$ x3 $\frac{1}{2}$ " and side pockets measure 5x12x3 $\frac{1}{2}$ ". Behind the side pockets are channels to carry your skis and pack comes with ice-axe carrier, accessory straps, waist belt and padded shoulder straps. The pack fabric is 11 oz. per sq. yd. Cordura nylon —the best pack fabric we know of. The pack is completed by a leather bottom of the best oiled, top-grain cowhide. Overall size 20 $\frac{1}{2}$ x12x6 $\frac{1}{2}$ ". Weight: 2 lbs. 13 oz.

COLORS: Blue, Green, Orange.

\$32.50



Sierra Designs Frame and Packsack

Our aluminum packframe is of a conventional contour design and has changed only in minor dimensions over the last eight years. It is not exotic, but it is strong, and for the average physique it carries heavy loads comfortably. Frame material is the quality alloy, 6061 T6. All welds are heli-arc. We guarantee any of our frames against breakage in normal - rough - use. Attached to the packframe is a full mesh panel back, which we have used for eight years with complete success. Waistbelt is full-circle type and padded. Shoulder pads are fully padded, all pins and wires are included and a pair of straps for attaching your sleeping bag are pinned to the frame.

Our packbag is made of 7.5 oz. para-pac nylon and comes in one model only— $\frac{2}{3}$ frame length, with sleeping bag, etc., carried underneath. Pack has five zippered pockets, and a flapped lid pocket. Aluminum hold-open bar and frame extension are included. Avg. wgt. of unit: 4 lbs. 6 oz.

SIZES: Small (Persons 5'6" and under); Medium (up to 5'10"); Large (over 5'10").

COLORS: Blue or Orange.

\$60.00

Fifty-Nine



Sierra Designs Product Colors



Sleeping Bags

Superlight - 1, 2
 Two Hundred - 3, 4
 Expedition
 outer - 5
 inner - 2
 Omni - 3
 Double Mummy - 3
 Foolsack - 3, 4
 Fairack - 3
 Foolsack - 4, 19, 20

Clothing

Sierra Jacket - 6, 7, 8
 Whitney - 6, 7, 8
 Down Hoods - 6, 7, 8
 Inyo Parka - 9, 10, 11
 Inyo Hood - 9, 10, 11
 60/40 Parka - 9, 10, 11
 Down Vest - 8
 Capoule - 12, 13
 Poncho - 12, 13
 Rainchaps - 13
 Gaiters - 14, 15

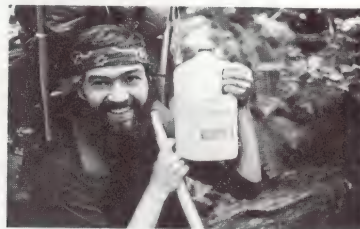
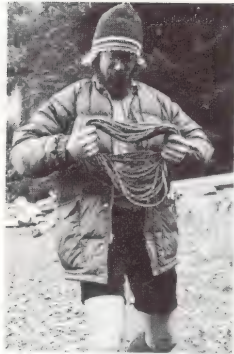
Tents

Glacier - 4, 19, 20
 Wilderness - 4, 19, 20
 Three Man - 4, 19, 20
 Yarp - 12, 13

Packs

Framepack - 14, 15
 Summit - 16, 17, 18
 Daytripper - 16, 17, 18
 Grandipity - 16, 17, 18
 Simplex - 16, 17, 18
 (7.5 oz mylon)

Sundries



Chouinard Yosemite Hammer: An outstanding hammer developed over a period of years on the most demanding climbs in the "valley." 18 oz. drop forged head and hickory handle. A very tough and well-balanced hammer. Each hammer has a sewn nylon shoulder sling.

Wgt.: 1 lb. 6 oz. **\$14.00**

Chouinard Alpine Hammer: Same technical specifications as the Yosemite hammer. The long pick on this hammer is useful for cleaning out cracks, placing and removing ice pitons. Special design of "drooped" pick enables it to be used as an ice dagger on hard ice.

Wgt.: 1 lb. 12 oz. **\$16.00**

Chouinard Piolet: Straight adz of forged nickle-steel. Features a carabiner hole and notches near pick end. Handle is made of laminated bamboo. Three lengths available: 55 cm. (22 in.), 70 cm. (28 in.), 80 cm. (32 in.). Short lengths are for use on steep slopes where not much snow is expected. Handle lengths on these axes allow their use in "close quarters."

Avg. Wgt.: 2 lbs. **\$33.50**

Joe Brown Helmet: Designed by a climber for climbing. Meets climbing helmet specifications of British Standards Institute. Three sizes are adjustable as follows: Sm.: 6½ to 6¾. Med.: 6¾ to 7¼. Lge.: 7¼ to 7¾. Colors: Red or Blue.

Wgt. 1 lb. 11 oz. **\$21.50**





ALPINE HAMMER
CHOUINARD
MADE IN USA

Metal Ice Axe: All metal Interalp ice axe, Everest model. Axe head made of chromemoly steel. Curved adz makes removal from glare ice easier. Axe features a carabiner hole, replaceable hardened steel point screwed into the end of the aluminum shaft. Good balance and a fine feel make this one of the best mountaineering axes available. 85 cm., 90 cm., 95 cm. lengths available. Avg. Wgt.: 2 lbs. **\$30.00**

Salewa Adjustable Crampons: From one of the most famous names in mountaineering hardware, we have one of the most reliable hinged crampons available. Adjustable from size 6 through 13. There are three widths available, so send **BOOT** outline when ordering. Wgt.: 1 lb. 7 oz **\$20.00**

Neoprene Crampon Straps: Tougher and easier to handle than web or leather. Wgt.: 8 oz. **\$6.00**

Rubber Point Protectors: Wgt.: 3 oz. **\$2.00**

H.H.H. Hammer Holster: Similar to the now unavailable Dolt holster. Made of white polyethylene. 1 3/4" slots. Non-political. Wgt.: 1 oz. **\$3.00**

Chouinard Alloy Pitons:

- | | |
|---|--------|
| 1. 1/2" Wedge angle, Wgt.: 2 oz. | \$1.00 |
| 2. 5/8" Wedge angle, Wgt.: 2 1/2 oz. | \$1.00 |
| 3. 3/4" Standard angle, Wgt.: 3 1/2 oz. | \$1.10 |
| 4. 1 1/4" Angle, Wgt.: 5 oz. | \$1.35 |
| 5. 1" Angle, Wgt.: 4 1/2 oz. | \$1.15 |
| 6. 2 1/2" Bong Bong, Wgt.: 6 1/2 oz. | \$2.70 |
| 7. 2" Bong Bong, Wgt.: 4 oz. | \$2.50 |
| 8. Cliff Hanger, Wgt.: 1 1/2 oz. | \$1.00 |
| 9. Rurp, Wgt.: 1/2 oz. | \$1.00 |
| 10. Knifeblade, standard, Wgt.: 3/4 oz. | \$1.25 |
| 11. Knifeblade, thick, Wgt.: 7/8 oz. | \$1.25 |
| 12. Bugaboo, short med., Wgt.: 3 oz. | \$1.75 |
| 13. Bugaboo, long med., Wgt.: 3 3/4 oz. | \$1.75 |

Retail Store stock features a wide variety of pitons, nuts and climbers' needs.

Jumar Ascenders: A lightweight aluminum device that enables one to climb a rope faster and more easily than the use of prussik knots. Will work on ropes from 3/8 in. thru 1/2 in. in diameter. Swiss made. Wgt.: 20-oz. per pair **\$37.50**

Oval Carabiner S.M.C.: The basic alloy biner.

- | | |
|-------------------------------|--------|
| Wgt.: 2 oz. | |
| Test 3000 lbs. + | \$2.25 |
| Orange anodized same as above | \$2.60 |
| Brake Bar for oval biners | \$.85 |

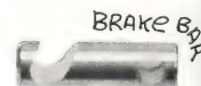
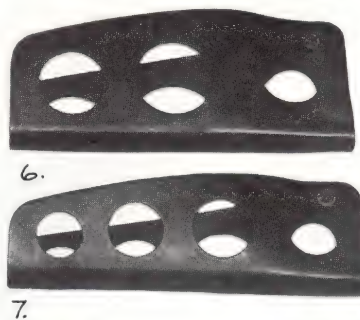
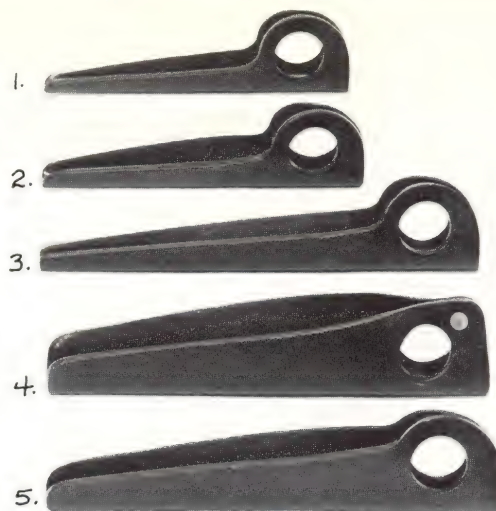
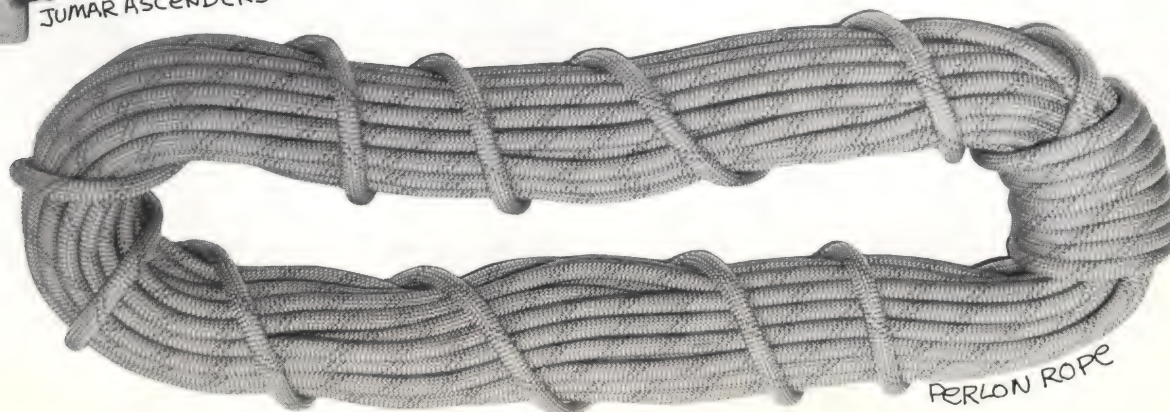
Locking Carabiner S.M.C.: Aluminum alloy.

- | | |
|------------------|--------|
| Wgt.: 2 oz. + | |
| Test 3300 lbs. + | \$3.50 |

Chouinard Carabiner: Cast/forged with strength 5000 to 6000 lbs. gate closed. Gate can be opened under body weight. Wgt.: 2 oz. + **\$3.50**

Perlon Climbing Rope: Edelrid brand perlon rope is one of the leading ropes made in the world today. Exceeds U.I.A.A. standards. Kernmantle construction with "kern" of continuous filaments. Characteristics of perlon ropes are fine handling and superior strength. 11 mm for high angle rockclimbing and 9 mm for double rope technique or more modest mountaineering.

- | | |
|-------------------------------|---------|
| 150' 11 mm—Wgt.: 7 lbs. 4 oz. | \$50.00 |
| 165' 11 mm—Wgt.: 8 lbs. | \$55.00 |
| 150' 9 mm—Wgt.: 5 lbs. 4 oz. | \$37.00 |
| 165' 9 mm—Wgt.: 5 lbs. 12 oz. | \$40.00 |





Child's Dacron Mummy Bag: A hard to get quality item that we do not produce. Insulated with 2½ lbs. of bonded Polyester Fiberfill. Two layers of overlapping insulation eliminates cold spots. Inner and outer shell are of ripstop nylon. Features a 42" zipper; 29" width at shoulders. Will fit child to about 5 ft. Wgt.: 4 lbs. **\$30.00**



Air-Lift B-9 Air Mattress: Air mattresses have just about disappeared from the backpacking scene in the last 5 or 6 years, because they were heavy, un-reliable (the lightweight versions) and not the best for insulation. This mattress is the best device we have seen for those who still wish to sleep on air rather than foam. There are nine separate and removable tubes of tough vinyl that insert into separate compartments made of ripstop nylon. Each tube requires a single breath for inflation and is easily deflated for packing. No shifting of tubes in the chambers and the odds are that you won't be let down during the night. Includes spare tube and a carrying sack. 20"x42" (packs to 8"x3½"). Wgt. 1 lb. 4 oz. **\$14.50**

LaFuma No. 18 Rucksack: Large sack, steel tube frame, expandable sides of bag accommodates large load. Features flap pocket and three outside pockets. Felt padded leather shoulder straps. Main sack before expanding 20"x20"x7". Will expand an additional 6". Wgt.: 4 lbs. **\$29.50**

Super Combi: LaFuma's newest mountaineering rucksack. Nylon sack with cotton against the back for breathability. Has a zippered pocket in top flap. Ice axe and crampon holders provided on main sack. Channels under side pockets are for carrying skis. Has flexible frame. Main sack size 23"x14"x6". Wgt.: 3 lbs. **\$35.00**



Stag Shirt: An excellent jacket-type shirt of 20 oz., 100% wool. Straightcut bottom, double thickness over shoulders, two breast pockets, two lower hand-warmer pockets. Even Sizes: 14 to 18. Colors: Muted Red, Gray, Green, Brown.
Avg. Wgt.: 2 lbs. 4 oz. **\$20.00**

Annapurna: These have to be about the best mountaineering glasses made. Hardcoated synthetic lenses are scratchproof and optically perfect. Leather nose piece and side wings are comfortable and properly vented. A most comfortable, nicely designed and executed glacier goggle. French made.
Wgt.: 3 oz. w/hard case. **\$11.00**

Sportif: By the same French manufacturer as the Annapurna goggle. An excellent pair of glasses for all sporting use. Curved, hardcoated synthetic lenses are optically true and will not shatter and are virtually scratchproof. Frames and bows are beautifully made and very comfortable.
Wgt.: 2 oz. in soft protective case. **\$11.00**

Roller Crusher Hats: Anyone who has been around backpacking life for the last umpteen years knows that these hats are the most friendly, salty, lovingly crushable hats in the outdoors. If you don't have one—then buy two, for one will surely be affectionately stolen. Buy them one size larger than normal. They shrink. Sizes: 6⁵/₈ to 7³/₄ (1/8" intervals) Colors: Black, Tan, Red, Green, Orange, Gray.
Wgt.: 2 oz. **\$3.25**

Down Mitts: Long gauntlet covers gap at wrist. Leather palm and nose wiper backing. An ideal mitt for really inclement weather. Sizes: Reg. and Lge. Tan Only.
Wgt.: 1 lb. **\$24.50**

Balaclava: From Scotland. Made of soft Shetland wool. Works as hat or full head cover. Colors: Navy, Orange, Gray, Fawn.
Wgt.: 4 oz. **\$2.75**

Navy Blue Uniform Shirt: The shirt worn by cops, firemen, C.P.O.s and Dr. Doolittle. 14 oz. wool—fully virgin, completely Navy, long-tailed. Accept no other. Even Sizes: 14 to 18.
Avg. Wgt.: 1 lb. 4 oz. **\$16.00**

Alaskan Shirt: A straightforward wool shirt of a jacket-weight 20 oz. 100% virgin wool. Long tails, two button-down breast pockets. Even Sizes: 14 to 18. Colors: Gray Tweed.
Avg. Wgt.: 1 lb. 12 oz. **\$16.00**

Storm Sweater: A good looking, rugged outdoorsmen's all wool sweater. The high crew-neck collar keeps out drafts without the constriction associated with a turtle-neck collar. Raglan sleeve. Made in England. Order one size larger than usual. Sizes: Sm., Med., Lge., X-Lge.
Colors: Bone or Navy.
Avg. Wgt.: 1 lb. 15 oz. **\$22.00**





ROLLER CRUSHER HATS

DOWN MITTS

SPORTIF GLASSES

ALASKAN SHIRT

STORM SWEATER

Svea 123 Stove: We highly recommend this stove for packers and cyclists. There are no "throw away" cartridges to be PACKED OUT OF THE WILDERNESS. Burns hotter and more efficiently than cartridge stoves; one-third of a pint of white gas will burn for over an hour. There is pressure relief valve in filler cap. This stove requires no pumping, but must be pre-heated to start (a really simple matter requiring a little patience in cold weather).
Wgt.: 1 lb. 4 oz. (comes with 8 oz. pot and windscreen) **\$14.00**

Bluet Stove: One of the most reliable and convenient stoves available. Uses pressurized cartridges that are quickly changed. No priming or pumping necessary. A cartridge burns for approx. 2½ hours.
Wgt.: w/o cartridge: 1 lb. 1 oz. **\$7.00**
Cartridges (six in a box):
Wgt.: 4 lbs. **\$4.75**
Wind Screen: Wgt.: 4 oz. **\$1.00**

Please carry your empty fuel cartridges out of the mountains.

Primus Minilantern: Lightweight camp lantern that emits about 75 watts. Uses same cartridge as stove above. Burns approx. 6½ hours.
Wgt.: w/o fuel: 14 oz. **\$13.25**

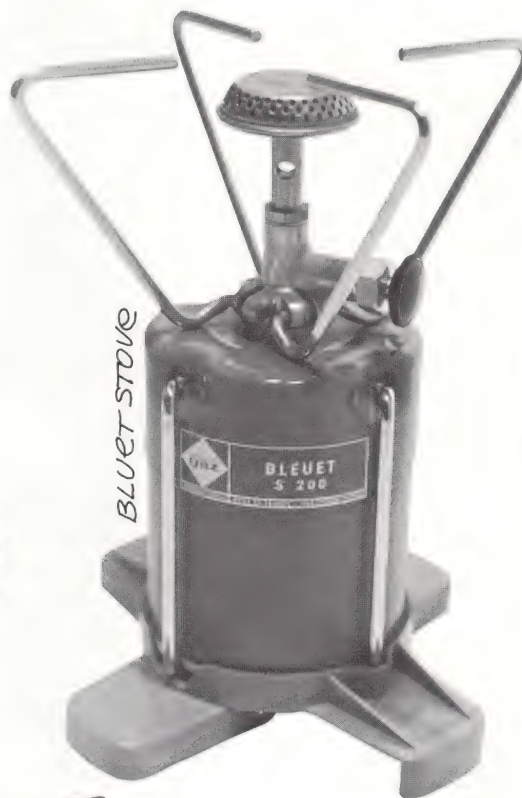
Please carry your empty fuel cartridges out of the mountains.

Primus Butane: Primus is well known for their camping stoves and their butane cartridge model has become very popular. Similar operation to Bluet, with the additional feature that cartridge may be removed during use and switched to the lantern. Burns approx. 3½ hours on a canister.
Wgt.: w/o cartridge: 15 oz. **\$10.75**
Cartridges (four to box):
Wgt.: 2 lbs. 12 oz. **\$3.85**

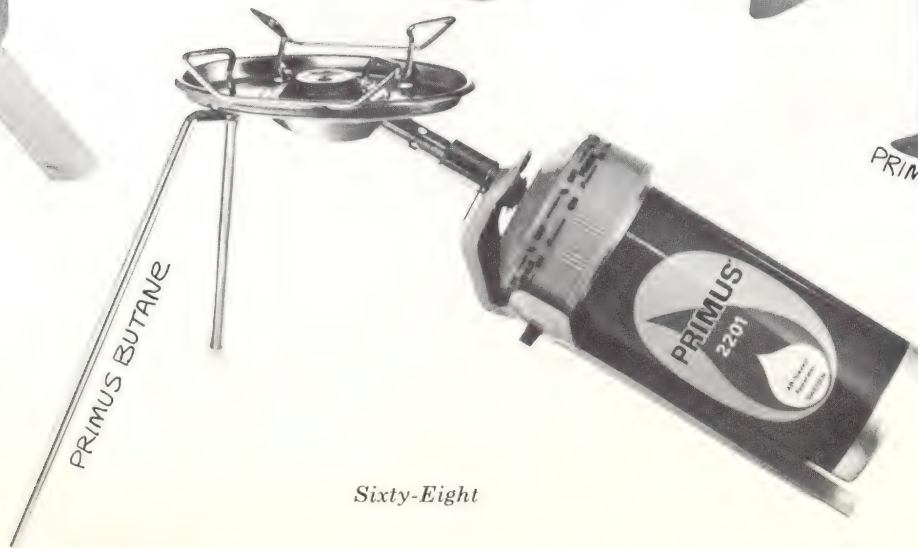
Please carry your empty fuel cartridges out of the mountains.



SVEA 123 STOVE



BLUET STOVE



PRIMUS BUTANE



PRIMUS MINILANTERN



Nesting Billies: Three aluminum billies with lids and wire bail handles. 5" billie holds 1 qt.; 6" holds 1½ qt.; 7" holds 2½ qts. Billies will "nest" one inside another to make a compact unit. Lids included.

Wgt.: 1 lb. 11 oz.

\$8.95

Skillet: A decent sized, lightweight backpackers skillet. Handle folds and the non-sticking surface of "Fluon" makes pot cleaning easier. Thick gauge aluminum. 9" diameter, 1½" deep.

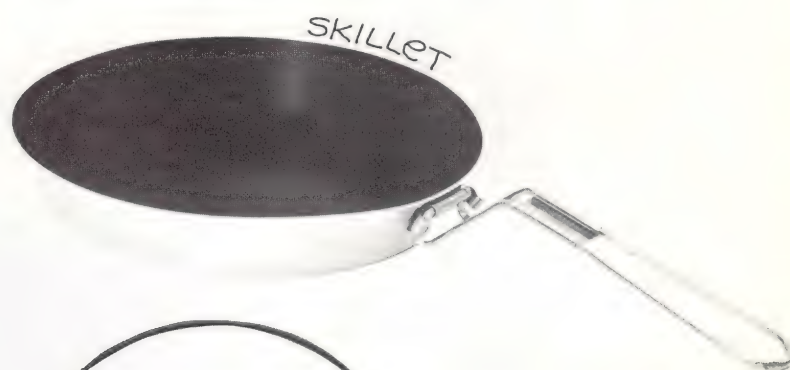
Wgt.: 13 oz.

\$2.50

Mountain Cookset: A three-piece all aluminum cook set. Two 7½" pots hold 2 qts. each and have wire bail handles. Broad base on pots gives a large heating area. Lid of set is used as a frypan. Can be used on stove or on open fires.

Wgt.: 1 lb. 4 oz.

\$4.50



Bellwether Bike Packs: Bellwether has established itself as one of the leading makers of bike packs. They have been responsive to new ideas and are constantly improving their products. All packs shown are made of waterproof, coated para-pac nylon. All zippers and webbings are nylon and fittings are nickel plate or aluminum.

Handlebar Pack: Main pack measures 10"x8"x5". Access to main sack is by zipper around top edge. Pocket on front closes with Velcro tape. A stiffener inside pack helps maintain shape. Pack straps to handlebars. A light metal frame is supplied with each pack and fastens to handlebars; this extra support allows heavier loads to be carried without having pack sag down toward front wheel. Colors: Red or Blue. Wgt.: 11 oz. **\$13.50**

Soft Bar-Pack: This is a smaller, lighter handlebar pack. Drum shaped rather than rectangular. Main compartment only with covered zipper running across width of sack. Straps and attaching method allow pack to be used as shoulder bag, or waist pack when removed from handlebars. (Designed for drop bars only.) Pack comes with clip-on metal support frame as with pack above. Measures 12"x7". Colors: Red or Blue. Wgt.: 5 oz. **\$9.00**

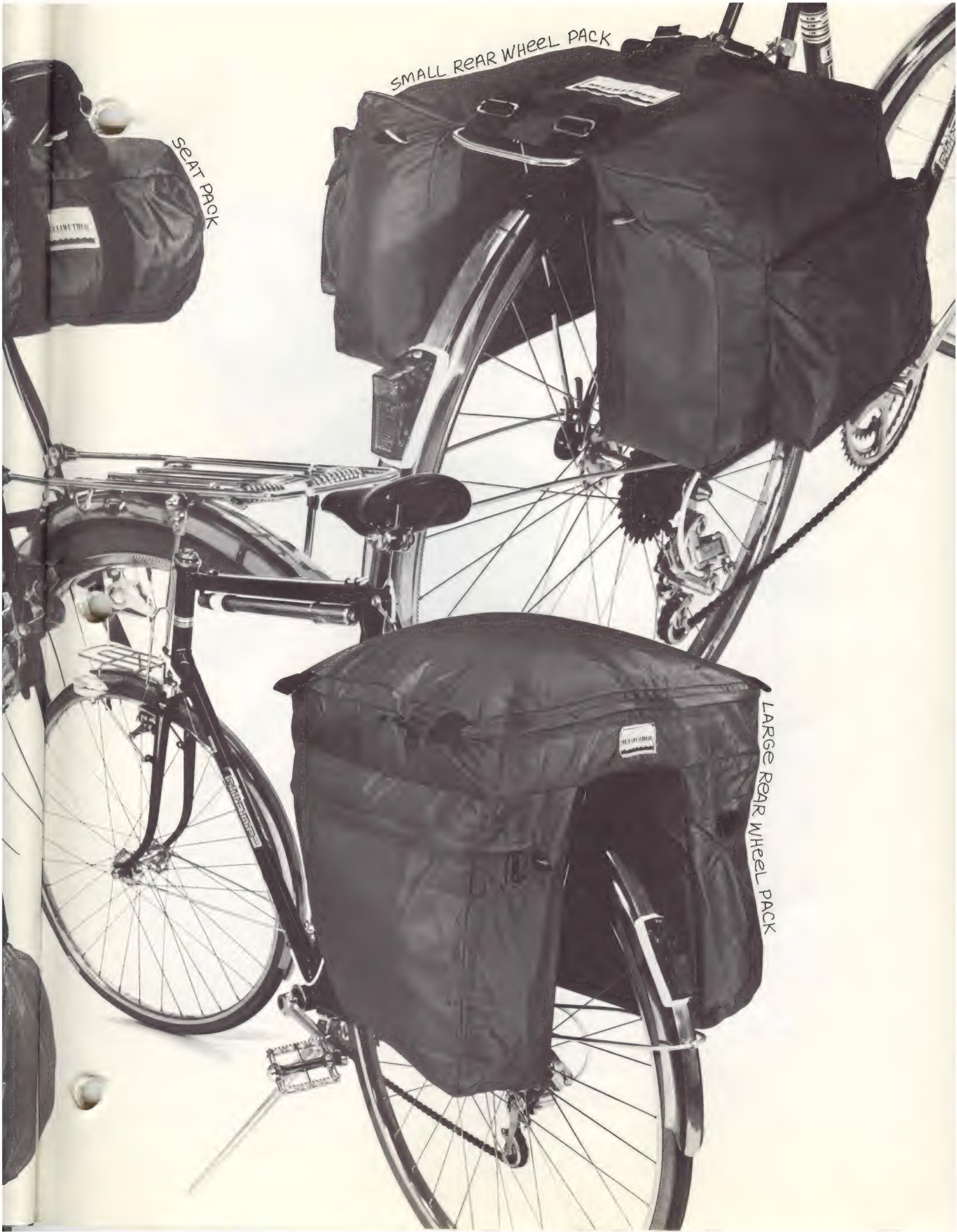
Seat Pack: Straps on below seat. Cylindrical shape measuring 9"x5". Ideal place/and pack for carrying spare parts, tools. Colors: Red or Blue. Wgt.: 3 oz. **\$5.00**

Rear Wheel Packs:

Large: Zippered main sack on each side measures 15" vertical and 14" along top, tapering to 10" at bottom; 4" thick. Top section is 14" square and 3" thick. There are lash points attached to top for additional gear. Underside of sack that is in contact with metal rack and exposed to the wheel is extra heavy Cordura nylon in 11 oz. weight. Pack comes with stiffeners. Colors: Red or Blue. Wgt.: 2 lbs. **\$30.00**

Small: Zippered main sack on each side measures 9" vertical and 12" along top; 4" thick. Each side has an additional outside pocket. Underside of sack made of extra heavy 11 oz. Cordura. Comes with stiffeners. Colors: Red or Blue. Wgt.: 1 lb. 12 oz. **\$20.00**





SMALL REAR WHEEL PACK

SEAT PACK

LARGE REAR WHEEL PACK

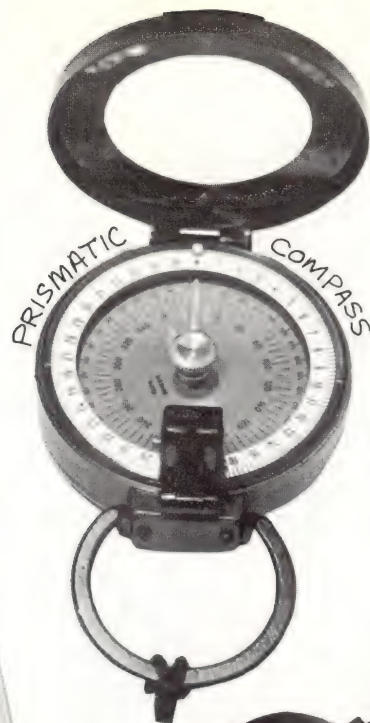
SUUNTO KB-20 COMPASS



Suunto KB-20 Compass: A very beautifully designed and constructed compass. Fluid filled bezel needle stops in four seconds. Very clear and easy reading of bearing and is reciprocal through viewer. Housed in high impact plastic (but very nicely done) case with lanyard. Reads to $\frac{1}{2}$ degree. Wgt.: $1\frac{1}{2}$ oz. **\$14.00**

Prismatic Compass: A quality compass made in West Germany. A superbly accurate instrument of the direct-reading prismatic type. Liquid filled. Has a light, strong case with lanyard and bale. Closed case fits into leather carrier. Instructions provided. Wgt.: 4 oz. **\$14.25**

Suunto Compass SP 68: An ideal compass for use with maps. Features a fluid filled bezel to damp needle movement. See-thru base contains a magnifying glass and mileage scale for 15-min. USGS maps. Includes instructions for use. Wgt.: 2 oz. **\$3.70**



Bushnell Binoculars: Custom compact binoculars are about $\frac{1}{2}$ the weight of most binoculars of similar power. Eye cups retract for people who wear glasses. All air-to-glass surfaces are coated. Center focus—one eyepiece is adjustable. These binoculars are outstanding.

6x25 Wgt.: 11 oz.

\$74.50

7x26 Wgt.: 11 oz.

\$76.50

Bushnell Monocular: An 8 power scope with fully coated lenses. 437' field at 1,000 yds. Use lens by itself as a close-up magnifying glass to study small objects. 24mm. objective lens. Comes with carrying case.

Wgt.: 4 oz.

\$19.95



SIERRA DESIGNS MAIL ORDER

4th and Addison Streets • Berkeley, Ca 94710 • (415) 849-1941

SOLD TO:

Name _____
 Address _____
 City/State _____ Zip _____
 SHIP TO (if different):
 Name _____
 Address _____
 City/State _____ Zip _____

CREDIT CARD PURCHASE
 BankAmericard ☐ Master Charge ☐
 Check one/no other credit card accepted

Name: _____
 B/A Card #: _____
 M/C Card #: _____
 Four Digit # Above M/C Name: _____
 Expiration Date: _____

DO NOT WRITE IN THIS SPACE

Shipped	B.O. Shipped	PRICE

Quant.	Item	Size	1st Color	2nd Color	Wgt.	PRICE

ATTENTION!



- SEE MAIL ORDER INFORMATION.
- IS FORM COMPLETE?
- CHECK ACCURACY OF YOUR FIGURES.
- GIVE ALTERNATE COLORS IF POSSIBLE.
- REMITTANCE ENCLOSED?

Total weight (add 1 lb. for packing) \$
 Total price of items \$
 5 1/2 % Sales tax (Calif. residents only) \$
 Postage/Ins. (AIR MAIL) 90¢ per lb. (Or Fraction Thereof) \$
 Postage/Ins. (SURFACE) 45¢ per lb. (Or Fraction Thereof) \$
 Special handling 75¢ \$
TOTAL REMITTANCE \$

Total price of items

Sales tax

Actual postage

TOTAL

REMITTANCE

REFUND Date

CHARGE Date

Ck. #

Inv. #

construction with laminated handle
 in ebony. Stainless steel blade with
 locking mechanism. 5" closed w/4"
 blade. Wgt.: 6 oz. \$8.00



Camper: Made by the original maker of Swiss Army knives. Victorinox. Has everything you really need in a knife. Two blades, corkscrew, punch, can opener, various screwdrivers and prying devices. Has lanyard bale.
Wgt.: 2 oz. **\$7.75**

Woodsman: Swiss Victorinox brand. Outstanding Swiss quality. Contains two utility blades, can opener, cap lifter, reamer, corkscrew, scissors, double-cut saw, lanyard shackle. This knife is not only an efficient tool for campers but makes an ideal gift.
Wgt.: 3¾ oz. **\$12.50**

Game Warden: Made by Puma-Werk of Solingen, Germany. A no-nonsense single-bladed clasp knife. Construction is very solid. Handle is one-piece solid brass, with side scales of Jacaranda wood set in. Blade will hold the sharpest edge, and is of finest quality stainless cutting steel. Blade locks open. Folds to length of 5"; blade 4". Comes with soft belt sheath.
Wgt.: 6 oz. **\$23.50**

Ranger Knife: A modestly-priced version of the Puma & Buck clasp style knives. Made in Japan. Sturdy construction with laminated handle in ebony. Stainless steel blade with locking mechanism. 5" closed w/4" blade.
Wgt.: 6 oz. **\$8.00**

BUILDING MATERIALS: Since many backpackers like to build their own gear and/or modify or repair what they have, we offer a selection of the materials we use in our own production facilities to satisfy your requests. We do not list specifications for fabrics, but if you must have a particular spec. we will supply it if we know it. Suffice it to say that the end use we indicate is well within the range of the material listed. Please note . . .

Fabrics:

Weights: Per square yard.
 Prices: Per running yard.
 Width: 45" unless otherwise noted.
 Alternate: Please give alternate colors, as there are long lead times for obtaining fabric. If we are out of stock of a color we will **cancel** your order if there is no alternate and fabric is not enroute.
 Swatches: We will send **selected** swatches on request.

Cordura Cloth: The toughest material available for making packs. Waterproof coated. 11 oz. Blue, Green, Orange. **\$5.00**

Para-Pac Cloth: The standard for most frame type packs and lighter duty climbing packs. 7.5 oz. Waterproof coated. Blue, Orange. **\$3.75**

1.9 oz. Ripstop: The standard nylon for sleeping bags and tents. Blue, Green, Orange, Nutmeg. **\$1.70**

1.5 oz. Ripstop: The very lightest for sleeping bags, tents, clothing, but requires more care. Navy, Blue, Red, Gold. **\$2.00**

Coated Ripstop: Light, polymer-coated fabric for flys, ponchos. Blue, Green, Orange (55" wide). **\$3.25**

Coated Nylport: 2.75 oz. super-coat. The standard for tarps, ponchos, tent floors, raingear. Green, Orange. **\$1.90**
 Gray (55" wide). **\$2.50**

BOOKS: The following list represents a **limited selection** of available topics. For further titles, request a **COMPLETE** list of books, magazines and maps. ALL BOOKS ARE POSTPAID WITHIN THE UNITED STATES.

1. American Alpine Journal. Annual publication of the AAC containing articles, book reviews, notes, etc., all peculiar to mountaineering. **\$5.00**

2. Climber's Guide to Yosemite Valley. Roper. Detailed introduction outlines history of rockclimbing in valley, rating system. Body of text presents precise description of standard routes. **\$6.95**

3. A Climber's Guide to the High Sierra. Voge. Sierra Club guidebook to trails and peaks in the High Sierras, with early history, advice on

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4. Sierra North. Schwenke and Winnett. 100 hikes in the back-country trails of the Sierras from Desolation Valley to Mono Creek. Selection based on scenic attraction, wilderness character and recreational potential. **Sierra South** covers Mono Creek to southern end of Sequoia National Park. **\$4.95**

5. Guide to the John Muir Trail. Starr. Most resourceful guide to the famous trail from Yosemite to Sequoia National Park regions. **\$2.00**

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8. Stalking The Healthful Herbs. Gibbons. Delightful as well as informative herbal, including many native North American culinary and medicinal herbs with drawings. **\$2.95**

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11. Annapurna South Face. Bonington. Brilliantly illustrated with color photographs, a dramatic account of the 1970 first ascent of one of the most forbidding mountain walls of the world. **\$10.00**

12. Americans On Everest. Ullman. World-renowned writer on mountaineering, gives official account of first American ascent of the world's highest peak. A classic mountaineering book. **\$10.00**

13. Food For Knapsackers. Bunnelle. Principles of food planning, cooking, cleaning up, master food list, recipes, sample menus, and equipment lists. **\$1.95**

14. The West Coast Trail and Nitinat Lakes. Sierra Club of British Columbia. A trail guide to the West Coast of Vancouver Island, from Bamfield to Port Renfrew. 50 miles of spectacular, demanding hiking. Includes large scale area maps and all information necessary for a safe journey. **\$3.50**

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